

CASE STUDY:

nationalgrid

# Ponders End Gasworks, Enfield

## History

Town gas production in Ponders End can be traced back as far as 1859 when the first gasworks site was established. With the increasing demand for gas in lighting, heating and cooking among the affluent in Victorian society, the site steadily expanded and in 1879 the Ponders End Gas Company was amalgamated with the Enfield Gas Company. In 1911 the site was transferred to the Tottenham and Edmonton Gas Light and Coke Company, which was expanding its operations throughout the area.



As part of National Grid's on-going commitment to regenerate former gasworks sites, investigations were first made into remediating the site back in 1996. During the course of subsequent discussions with officers at the London Borough of Enfield regarding redevelopment of the site, the council suggested that they would like to purchase it for use as an Academy School. Further dialogue between National Grid and the Council confirmed that the site did indeed have the potential to offer a new state-of-the-art home to the Oasis Academy Hadley. Sale contracts were exchanged enabling the site to be remediated by National Grid's team to a standard suitable for the proposed school. The site works finished in September 2011 allowing the sale to complete.



The company operated the gasworks until 1949 when all gas production was nationalised and a new remodelled gasworks was built. This was held in such high esteem that in 1953 the Duke of Edinburgh visited the new cutting edge facility and was given a tour by Sir Harold Smith, Chairman of the Gas Council.

The gasworks continued to provide power and heat to thousands of homes until 1972, when cleaner North Sea natural gas was discovered, making town gas generation unnecessary.

Remediation strategies were developed in line with the London Borough of Enfield's wishes to ensure that the site was remediated to allow its next use as an Academy. Academy blueprints were used to ensure that all structures on the site, as well as the foundations of the former gasworks were removed in order to create a blank canvas for the redevelopment of the site.

three storey school  
catering for more than  
**1,900**  
students, with  
classrooms protected  
from traffic noise

# Regeneration Strategy

Following extensive site investigations, a strategy based on the reduction of significant environmental risks was agreed in line with discussions with the Environment Agency and the Contaminated Land Officer of the London Borough of Enfield. The work to regenerate the site initially began in 2007 and was carried out in three phases including the removal of three gasholders. The final phase of work was approved by planning in May 2010.

Once the three gasholders were dismantled, much of the 3.4 hectare site needed to be excavated at various depths depending on what was found. National Grid's extensive site investigations allowed for estimations on how much material would need to be removed from the site and how much could be reused. This was vital to the projections of site traffic and how long the overall remediation would take.

## Recycling

- 99,500 tonnes of material was excavated, stockpiled, screened and tested
- Over 3,500 tonnes of scrap metal was recycled during the gasholder demolition
- All brick and concrete from the site was crushed and re-used
- 62,000m<sup>3</sup> of water (equivalent to nearly 25 Olympic swimming pools) from the gasholders was treated and discharged

## Protecting the Local Environment

A strict environmental control regime was established to ensure that all remediation activities met, and in most cases exceeded, legislative and recommended standards. Protecting the local environment is very important for National Grid, so all possible measures were taken to ensure that nearby residents were protected from disruption wherever possible, including:

- Covering odorous material on site
- Using odour neutralisers to combat smell
- Lifting concrete in large slabs and breaking it away from site boundaries to reduce noise and vibration

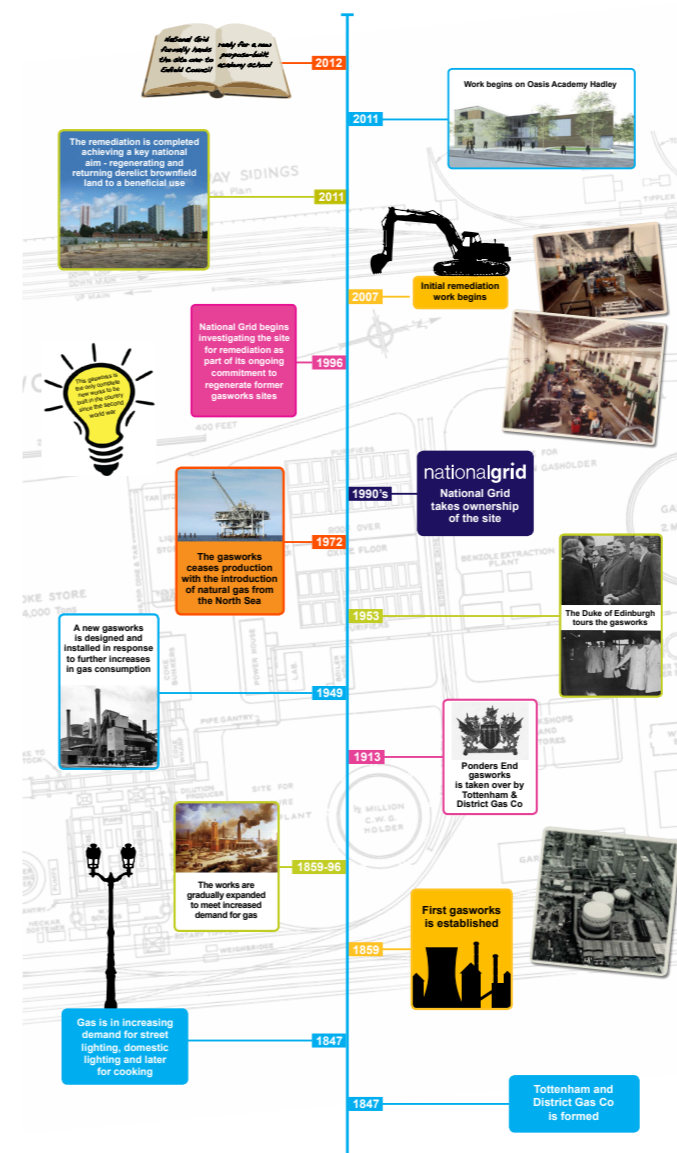
Thorough sampling of all remediation areas was undertaken by experienced Environmental Engineers who have worked with National Grid Property for many years. Dismantling and removal of the gasholders took six months, with each holder measuring over 40 metres in width. This was the largest operation of its type undertaken during 2010.

“The former gasworks land on South Street will accommodate Oasis Academy Hadley, a state of the art facility for its students and the community and will be at the heart of Ponders End, vital to Enfield Council’s regeneration plans to improve the area.”  
Mayor of Enfield - Councillor Christiana During

# Outcome

## A brief history of the Ponders End gasworks

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The successful remediation of this site has resulted in a redundant gasworks being returned to a 'blank canvas' on which a modern Academy school is now being built for the benefit of young people and adults in the Ponders End community.

Construction company Balfour Beatty began building the new home of the Oasis Academy Hadley on the former gasworks site in November 2011. The three-storey school will eventually cater for more than 1,900 students, with classrooms protected from traffic noise by extensive tree planting around the building. The school opened in January 2013.

A key factor in achieving the successful remediation and redevelopment of this former gasworks site for community benefit has been the co-operation and partnership working between National Grid, the London Borough of Enfield and the local community in Ponders End.

Following completion of the remediation at Ponders End gasworks, National Grid and the London Borough of Enfield jointly hosted a handover ceremony at Alma Primary School in Ponders End. Guests included the Mayor of Enfield and other Councillors, teachers and staff from Oasis Community Learning and Alma Primary, residents and members of the local community as well as the Balfour Beatty team who constructed the new Academy.

National Grid Commercial Property Manager, Paul Mantell, gave a presentation on the history of the site and the challenges involved in remediating it. This was followed by a short speech by the Mayor of Enfield, Councillor Christiana During, who then unveiled a plaque from the original gasholders that has been restored by National Grid. This has been displayed in the new Academy and provides a link to the heritage of the site.

As part of National Grid's commitment to the community, the team also worked with Alma Primary School and the Woodland Trust to leave a further positive legacy by creating a 'Forest School'. This is an outdoor educational space to benefit current and future pupils.