
Fray Bentos (Oriental Republic of Uruguay) No 1464

Official name as proposed by the State Party

Fray Bentos Industrial Landscape

Location

Department of Rio Negro
West Uruguay

Brief description

The industrial complex of Fray Bentos located on the Uruguay River west of the town grew out of an initial meat salting works established in 1859 to capitalise on cattle raising on the huge grassland within the river basin of the Uruguay, Parana and Rio de la Plata. Illustrating the whole process of meat sourcing, processing, packing and dispatch, the site includes buildings and equipment of the Liebig Extract of Meat Company which exported meat extract and corned beef to the European market from 1865 and the Anglo Meat Packing Plant which exported frozen meat from 1924. Here German research and technology combined with English enterprise to provide food for a global market including to the armies of two World Wars in the 20th century. Workers' housing and social institutions which accommodated and supported the cosmopolitan workers' community continue in use today.

Category of property

In terms of the categories of cultural properties set out in Article 1 of the 1972 World Heritage Convention, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013), paragraph 47, it is a *cultural landscape*.

1 Basic data

Included in the Tentative List

1 February 2010

International Assistance from the World Heritage Fund for preparing the Nomination

2012

Date received by the World Heritage Centre

15 January 2014

Background

This is a new nomination. An ICOMOS Advisory Mission visited the site from 25 to 28 February 2013 (Stage 1) and from 23 to 26 July 2013 as part of the Upstream Process.

The mission report dated August 2013 is included in the nomination dossier (Annex II). It concluded that in general the property had the potential to constitute a robust nomination to the World Heritage List.

Consultations

ICOMOS consulted TICCIH and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 8 to 12 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 21 August 2014 requesting a map showing the relationship of the nominated property boundary to the identified features of the Liebig-Anglo period of the property, clarification regarding the attributes and clarification as to whether the Management Plan had been approved and if not a timetable for its approval. A second letter was sent on 19 September 2014 requesting clarification on the inventory and a deepening of the comparative analysis. A third letter was sent to the State Party following the ICOMOS Panel in December 2014 regarding changing the name of the property; appointment of an overall site manager; representation on the Management Committee; and extension of the Management Plan to cover a number of issues. A fourth letter was sent to the State Party on 13 January 2015 regarding the level of protection of the buffer zone and inclusion of a risk preparedness strategy. A response to the first letter was received on 21 October 2014 and to the second on 5 November 2014. A response to the third and fourth letters was received on 28 February 2015. The information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The Fray Bentos industrial landscape covers an area of 273.8ha and is surrounded by a buffer zone of 2127.7ha.

Industrial facilities

Located on land projecting into the Uruguay River, the industrial complex spreads inland from its dock area in a range of saw-tooth roofs punctuated by the higher elements of the enormous cold storage building and tall brick, boiler chimney. Its natural harbour attracted first the Liebig Extract of Meat Company which exported meat extract and corned beef to the European market from 1865 and subsequently from 1924 the Anglo Meat Packing Plant which exported frozen meat. German scientists brought machines and tools from Scotland and developed meat processing technology at the Fray Bentos facility as well as cattle farming research which became a model for other parts of the world.

The industrial complex is located adjacent to prime, fertile land conducive to cattle-raising and agricultural production where the primary products could be obtained. Key buildings illustrating the industrial processes up to the time the factory closed down in 1979 include the Machine Room, Meat Extract Department, Slaughter Yard/Offal-Viscera Handling Area, Rendering Room, Cold Storage and Tinwork Department. These are connected by the internal roads, conveyor lines and aerial tunnels used by the workers and products, and still contain machinery that existed in 1979. Power was provided in the Boiler Room by oil-fuelled, water-tube steam generators, four dating from 1906 and six from 1922. Buildings remaining from the Liebig period are constructed of brick with zinc sheet or tiled (slate) roofing on cast iron or timber structures. Buildings from the Anglo period (1920s) include the large Cold Store and the Machine Room housing the ammonia compressor required to refrigerate it. These were built using pre-fabricated steel structures imported from England with concrete slab floors and walls. The complex is approached from the hinterland by the stock route (Cattle Drive Road) leading to the holding pens and Slaughter Yard area.

Residential area

Workers' housing is located east of the industrial complex and includes the earliest manager's house and administrative offices, technicians' housing and single family housing distinguished by French tiled roofs as well as rows of single men's accommodation distinguished by corrugated sheet roofs. The area is characterised by vegetation comprising indigenous flora merged with exotic plants brought by the English staff of the company from Asia, Africa and Europe. It includes the cafeteria, social clubs, sports clubs including a golf course, hospital and school. To the south of the industrial facilities is the mansion Casa Grande including a large garden on high ground with a good view of the industrial area. This was built by engineer George Giebert, the first manager of the factory in 1868.

Fray Bentos Town

This is not part of the nominated property and is separated from the industrial property by the Laureles Stream which runs into the Uruguay River from the south. However the north-west part of the town reaching back six blocks from the Uruguay River which was the first part of be settled is included in the buffer zone. Founded in 1859 as Villa Independencia, the town developed in conjunction with the industrial enterprises, providing them with human resources and essential services. Laid out on a grid pattern oriented north-west to south-east and including green squares, its urban architecture follows European styles of the period and is still of low scale.

History and development

Before 1865 the land on which the nominated property is located was a large Spanish cattle ranch and was bought by German engineer Georg Giebert in 1863 in order to establish his meat extract enterprise at the natural harbour

where English landowner Richard Hughes had built a meat salting works in 1859.

From 1865 to 1924 Giebert developed the Liebig Extract of Meat Company Limited (LEMCO) producing meat extract and corned beef using the method invented by German chemist Justus von Liebig. This formed an important part of the diet of troops during WWI. Other products exported included organic fertilizer, which replaced Peruvian guano. Immigration was encouraged in order to supply the work force and workers' housing, social and sports facilities were established as well as English language teaching. A workers' cooperative was formed.

In 1924 the Vestey Group from England took over the enterprise, Liebig having given up Fray Bentos in favour of consolidating their activities in Argentina and Paraguay. The period from 1925 to 1950 was characterised by the development of meat packing specifically canning in response to the demands of the European market during WWII. The Anglo meat packing plant provided employment for 5,000 workers at a time when the population of Fray Bentos was 12,000. Immigration increased to include over 50 different nationalities. The English colony included around 70 families and was equipped with a golf course still essentially intact today.

The period 1950 to 1979 following the end of the War era was one of decline for the Fray Bentos enterprise as demand for the product reduced. The population increase in Montevideo attracted industry and workers there and questions raised in Britain following a typhus outbreak about water cooling practices at Fray Bentos and other South American meat works contributed to the reduction in production. ANGLO began to focus its production in Buenos Aires and the Uruguay government intervened to keep the Fray Bentos plant going. Subsequent efforts by other companies to take over were unsuccessful and the site was finally vacated in 1985.

Since then part of the site has become the Museum of Industrial Revolution (in 2005), and part has become the Municipal Industrial Park where buildings have been given new uses by 22 companies. There are also 19 social and cultural organisations accommodated within the property. Some descendants/relatives of workers of the old factory still live in the residential sector and in the town and are sources for the oral history of the site.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The Preface to the nomination dossier points out that the Latin American and Caribbean Group GRULAC agreed that Fray Bentos Cultural-Industrial Landscape was the most representative of a great part of the historical development process in the American continent following a thorough analysis of its viability, characteristics and history. The comparative analysis

provided by the State Party covers several other industrial sites in South America, including meatpacking works such as Pueblo Liebig's factory in Colon, Argentina and Puerto Bories' in Chilean Patagonia, both of which are shown to have been relatively isolated and had much lower production and global reach than Fray Bentos although sharing similar characteristics in relation to the provision of workers' accommodation and facilities. The nominated property is also compared with Conchillas in Uruguay which was a stone and sand extraction enterprise whose products were used for the construction of the port of Buenos Aires at the end of the 19th century. While it also provided workers' housing and facilities it was a relatively short-lived operation.

The property was compared with World Heritage listed properties: Sewell, Chile (2006, (ii)) a copper mining industry and town; and Blaenavon, UK (2000, (iii) & (iv)) steelworks and town. Apart from the different industrial processes represented by these sites, and their contrasting geographical and topographical locations, it is argued that Fray Bentos is significantly different in representing an industry with a wide global market and a cosmopolitan worker community, for which the company provided exceptional social facilities. ICOMOS considers that the nominated property could also be compared with the WH listed Humberstone and Santa Laura Saltpetre Works, Chile (2005, (ii), (iii), (iv)) where the development of saltpetre mines and company towns from 1872 to the mid-20th century had a worldwide market for their production of agricultural fertilizer and involved immigrant workers from South America and Europe with consequent exchange of cultural values and development of workers' unions. However the Fray Bentos site represents another category of early 20th Century industry – food production for a global market which was dependant on the international exchange of research and technology.

ICOMOS notes that there were large scale meat processing and freezing works in Australia and New Zealand in the same period including the British company Borthwicks' Waitara Works in the North Island of New Zealand, Belfast (Canterbury) works in the South Island, and in Australia at Portland, Victoria; Brooklyn, Victoria; and the Moreton Works in Queensland some of which had their own ports, and the company also owned cattle stations (ranches). None of these have been investigated as to what now remains of these establishments. However *Borthwicks A Century in the Meat Trade (1863-1963)* records that South America was the leading supplier of meat to Europe during the early part of the 20th century.

Remains of buildings which housed meat canning and freezing works at Maribyrnong near Melbourne are protected on the Victorian Heritage Register: the Melbourne Meat Preserving Company pioneered meat preserving by the vacuum process, and the Australian Frozen Meat Export Company pioneered bulk freezing and is credited with the first successful frozen meat export in the world. However the site does not

demonstrate the processes to anything like the same extent as at Fray Bentos and does not include cattle raising territory, workers' housing or social institutions.

The Vestey Company had cattle stations in the Northern Territory of Australia, and a large meat works at Darwin which operated only for three years (1917-1920), of which only the water storage tank now remains. Photographs indicate that it had a very similar layout to the Vestey phase of Fray Bentos.

Additional information from the State Party in response to ICOMOS' second letter states that The Australian Meat Company (1823-1914) founded in London by Charles Grant Tindal, a cattle breeder and entrepreneur in the market of canned food in Australia used Liebig's process to produce meat extract at Ramornie, NSW Australia and exported canned meat to England from 1866 in large quantities. ICOMOS notes that the company was subsequently sold to the Kensington Meat Preserving Co. in 1915 and was demolished c.1920.

The State Party also highlights the meat packing enterprise of Phillip Danforth Armour in Chicago, which shared technological information with the Liebig Company in the late 19th century. The Armour Company was part of the industrial complex at the Union Stock Yards, at the centre of the American meat packing industry where animals were slaughtered, processed and packed for rail shipment. ICOMOS notes that decentralisation of the industry resulted in abandonment of the Yards in the 1950s. Part of the area became The Stockyards Industrial Park in 1971 and the area behind it remained home to a thriving immigrant population. The Yards became famous in American literature and popular culture but apart from the main entrance gate, now a Historic Landmark, little remains of the former enormous industrial establishment.

ICOMOS considers that the comparative analysis while not exhaustive has established that Fray Bentos stands out in retaining all the evidence needed to illustrate this global food production enterprise from pasture to processing factory to port.

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Representative of an industry with technological edge and global reach due to the international exchange of technology and research.
- Exceptional exploitation of the natural advantages of the particular location.

- Representative of the cosmopolitan worker community which became the basis for Uruguayan society in general.
- Encapsulates a century of economic and social change due to industry in South America up until the 1970s.

ICOMOS considers that this justification is appropriate because the property stands out in illustrating the whole process of meat sourcing, processing, packing and dispatch on one site in the early 20th century, which only became possible due its location combining prime cattle raising country with port facilities; through the introduction of German expertise and research, and the immigrant worker community.

Integrity and authenticity

Integrity

The nominated property includes all elements related to the history of the site and the period of its operation and is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. In the industrial area, key buildings and complementary facilities are preserved. Some (machine room, meat extract, and viscera, head, tripe, and offal handling area) retain much of the original interior equipment, illustrating the production process and role of facilities. Some buildings are being reused by industrial enterprises and businesses; others have deteriorated badly including the cold storage building and boiler house. Traces of buildings lost during the historical period (hide storage; weaving works; boxing/woodworks and the bonded warehouse) allow a sufficient understanding of the entire system. Housing in workers' neighbourhoods from different periods is preserved, yet typically with several interventions, some of which have impoverished the appearance of some sectors. Some facilities including the clinic and school retain their original use. The landscape setting is appropriate in size and views from the river and town are maintained.

Authenticity

The property is authentic in terms of location and setting, materials and substance and use/function in terms of the buildings which form part of the Museum of Industrial Revolution. The archive contains historical documents with technical information providing a source for repairs and restoration. Other buildings have been adapted for new uses and workers' housing has been upgraded to provide more modern accommodation for families now living there, many of whom have a connection with the property through family members who worked there. ICOMOS considers that authenticity is vulnerable to proposed new development within the property including new uses for buildings and sites as well as new construction. Impact assessment should be undertaken for proposed interventions in accordance with Paragraph 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

ICOMOS considers that the conditions of integrity and authenticity have been met.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iv) and (vi).

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party primarily on the grounds that the site is evidence of the interchange of human values between European society and the South American population of the 19th and 20th century which effected social, cultural and economic changes in both places during that period – this being largely due to the immigrant workers who arrived from more than 55 nations.

ICOMOS considers that the bringing together of German research and technology with the natural advantages of the location together with English enterprise was the basis of the important interchange on developments in technology as demonstrated in the buildings and machinery which enabled the production and export of canned and frozen meat on a global scale.

ICOMOS considers that this criterion has been demonstrated.

Criterion (iv): *be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage (s) in human history;*

This criterion is justified by the State Party on the grounds that the ensemble of cattle pasture and handling facilities, industrial buildings, mechanical facilities, port facilities, residential fabric and green areas linking the river and agricultural areas to the city stands out as an example of early 20th century industrial development.

ICOMOS considers that the combination of location, industrial ensemble, housing and social institutions enables the whole process of meat production on a global scale to be understood and that the site illustrates the technological, social and cultural factors extremely well.

ICOMOS considers that this criterion has been justified.

Criterion (vi): *be directly or tangibly associated with events or living traditions, with ideas or with beliefs, with artistic and literary works of outstanding universal significance;*

This criterion is justified by the State Party on the grounds that the site is associated with ideas and

research that enabled the improvement of cattle breeds and technical research that enabled the production of meat extract in particular which in turn influenced diet and nutrition internationally.

ICOMOS considers that these ideas do not justify outstanding universal significance.

ICOMOS considers that this criterion has not been justified.

ICOMOS considers that the nominated property meets criteria (ii) and (iv) and conditions of authenticity and integrity.

Description of the attributes

The attributes expressing the Outstanding Universal Value of the property are its location and setting between the Uruguay River and agricultural hinterland adjacent to Fray Bentos Town; the buildings, sites and machinery that illustrate the complete meat works process from cattle raising to processing to port shipment of the final product; the residential neighbourhood, manager's residence and garden, and the buildings and sites that housed the social institutions.

4 Factors affecting the property

The establishment of Uruguay Pulp Mill facilities to the west of the nominated property in 2009 is mentioned in the nomination dossier as having a possible impact in terms of development and environmental pressures. However these reached their peak in 2010 and are not now considered a threat. The nomination dossier also records pressure from Argentinean developers to increase the urban density within the nominated property, making use of empty and eroded areas for holiday accommodation. Other proposals include locating higher education institutions within the site. Any such proposals are subject to controls relating to the property's designation as a National Historic Landmark.

The property is not subject to flooding, but the possible impact of climate change has not been considered. Nevertheless the Municipality has provided deposit areas to store moveable objects in the case of any flood emergency. No seismic activity has ever been recorded. Precautions are taken in the face of forecast strong winds and squalls, followed by maintenance inspections and repairs in their wake. Fire threats are dealt with by the official fire department located in the city area of the buffer zone, together with volunteer fire-fighters. Investigations are underway with a view to reactivating the historic fire infrastructure within the property. Buildings which currently accommodate industrial activity comply with municipal regulations in terms of fire-fighting equipment.

The number of residents within the nominated property was 785 two years ago. The number of annual visitors is approximately 18,000-20,000. The Local Plan includes

restrictions on expansion of the Beach Resort located to the south of the buffer zone of the nominated property in anticipation of possible increases due to World Heritage inscription if this should occur.

ICOMOS considers that conversion of the industrial buildings to accommodate new uses; alterations to workers' housing and construction of new facilities such as higher education institutions on vacated sites need to be guided by specific standards aimed at minimum intervention and compatibility with Liebig-Anglo structures in order to maintain integrity and authenticity. The archaeology of vacated sites also needs to be investigated. Intervention proposals require impact assessment in accordance with Paragraph 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*. In response to ICOMOS' third letter, the State Party has agreed to this process.

ICOMOS considers that the main threats to the property are fire and flood.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The property boundary has been drawn to include all areas related to Liebig-Anglo's industrial production including residential areas, cattle pens and roads and areas of possible archaeological interest. The boundaries are clearly defined and enclose the area protected by existing legislation. The buffer zone is of adequate size to protect important views and provides extra protection under the Local Planning Regulations.

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

Ownership

The State owns almost 80% of the nominated property. The remainder is privately owned.

The river area of the buffer zone is State-owned, although under the jurisdiction of different government agencies. The town includes both municipal-owned building and public spaces and privately-owned buildings and land.

Protection

The nominated property is protected as a National Historic Landmark under the Heritage Act No. 14.040, August 1971 as amended in 2008 and the Regulatory Decree 536/72. Properties owned by government agencies and non-state corporations are protected under Act No. 17.473, 9 May 2002. The Acts are administered by the National Cultural Heritage Commission, which is under and chaired by the Ministry of Transportation and Public Works. It comprises representatives of the Ministry of Transportation and Public Works, the University of the

Republic and other institutions including the Boards of the National Library and National History Museum.

The buffer zone in general is not yet legally protected to this level, although some buildings in the foundational area of the City of Fray Bentos are designated as National Historic Landmarks. However it is fully protected by the Local Planning Regulations. In response to ICOMOS' fourth letter, the State Party has advised that the urban area of the buffer zone will be fully protected as a National Historic Landmark by April 2015. The archaeological heritage is protected under Act No. 14.040 and Decree 526/72 on land, and Act No. 14.343 and Decree 692/86 under water.

ICOMOS considers that protection is effective.

ICOMOS considers that the legal protection of the property and buffer zone is adequate. However ICOMOS considers that legal protection of the entire buffer zone would be improved by raising it to the highest level as agreed by the State Party.

Conservation

According to the nomination dossier compilation of an inventory for the nominated property including machinery and equipment is in progress and will be completed shortly. The additional information provided by the State Party in response to ICOMOS' second letter states that 30% of the buildings in the industrial area remain to be inventoried and will be completed by January 2015, and the remaining 80% of the machinery and industrial equipment will be inventoried by March 2015. Sample sheets of the inventory were provided. An inventory of the foundational area of the City of Fray Bentos (part of the buffer zone) is already complete. Underwater archaeological research is underway in the river area of the buffer zone. The rural area of the buffer zone remains to be researched.

ICOMOS notes that the inventory should include the workers' housing, cattle pens, manager's house, weigh station and that a comprehensive data base covering materials, vacated sites, furniture and machinery is needed as a basis for monitoring, conservation and maintenance. Some important buildings, particularly the cold storage room and rendering room require emergency works.

Buildings forming part of the cultural tourist itinerary have been repaired and conserved, with works ranging from cleaning to restoration. Surveys of other buildings within the nominated property are currently being undertaken to establish conservation tasks.

ICOMOS notes that intervention projects are related to new uses of the buildings rather than being planned within an overall conservation strategy of preventative conservation and maintenance. ICOMOS considers that there is a need for a comprehensive conservation management plan related to a complete inventory. In response to ICOMOS' third letter the State Party has

provided further information on the progress of the inventories and stated that conservation and maintenance will be related to these.

ICOMOS notes that inventories are being completed to form a basis for monitoring, conservation and maintenance, and considers that a comprehensive conservation management plan is required as part of the Management Plan.

Management

Management structures and processes, including traditional management processes

The property has been managed at site level by the Anglo Management Committee since 2008 with input from representatives of the Ministry of Culture and Educational Affairs; Ministry of Housing, Land Use Planning and Environment and the Municipality of Rio Negro. This body is responsible for the implementation of the Property Management Plan. Risk preparedness is not specifically covered although measures are in place as noted above under Factors affecting the property. Financial resources are provided through the Five-Year Budget Plan of the Municipality of Rio Negro, currently 2011-2015, which receives funds from the Central Government as well as from its own taxation measures. Expertise derives from staff within the Municipality of Rio Negro, the Cultural Heritage Commission and the University of the Republic. Information provided by the Anglo Management Committee to the ICOMOS mission indicates that the Museum of Industrial Revolution includes technical staff in four departments: Conservation (4); Education and information (3); Administration and cultural investigation (2), and documentation (5). It is proposed to locate the Technological University within the industrial area of the nominated property and that this will incorporate training facilities for staff and volunteers at the site. ICOMOS notes that it is proposed to locate the university on the site of the former Administration building and considers that archaeological investigation of the site and impact assessment is required.

Policy framework: management plans and arrangements, including visitor management and presentation

The Municipality of Rio Negro's Fray Bentos Local Plan and Influence Zone protects and guides land use and development in the wider area of Fray Bentos to an extent of 26,800ha. This has particular relevance to the upgrade of housing and accessibility within the nominated property. The Property Management Plan 2012-2015 was approved by the National Cultural Heritage commission on 2 January 2014. It includes structural and feasibility studies in relation to new uses for existing buildings; completion of the inventory; condition surveys; oral history project; digitisation of the Liebig-Anglo archive; research; Building Conservation Plan and various visitor interpretation proposals. ICOMOS considers that it should be extended to include a risk preparedness strategy for fire and flood,

and guidelines for archaeological investigations and impact assessments relating to intervention proposals. In response to ICOMOS' third and fourth letters the State Party has agreed to undertake these, and has stated that the risk preparedness strategy will be ready by December 2015.

The Museum of the Industrial Revolution has run tours of the industrial precinct by local volunteers since 1990. It is proposed to expand these to cover other aspects of the site including the cattle handling area and the housing and social life of the workers, possibly also including a Museum of Immigration, as well as covering the landscape and natural features. It is expected that expansion of tourist interpretation will require funds to be sourced from the private sector. ICOMOS notes that the archive section is a valuable resource for research and presentation of the property, but it requires improved accommodation including security and environmental monitoring.

Involvement of the local communities

The local community within the nominated property and the town are involved as volunteers - guiding visitors and contributing to research. Residents are also involved with the industrial enterprises and social institutions accommodated within the property. ICOMOS considers that the volunteers and local industrial enterprises and social organisations should be represented on the Anglo Management Committee. In response to ICOMOS' third letter, the State Party has outlined the process for this.

ICOMOS considers that management of this large property is a challenge for the staff available and notes that there is apparently no overall site manager. In response to ICOMOS' third letter, the State Party has advised that the President of the Anglo Management Committee, who is an architect, is the Site Manager.

ICOMOS considers that special attention is needed for completion of inventories, comprehensive conservation management plan, archaeological investigation, guidelines and impact assessment of proposed interventions; risk preparedness; improved accommodation of the archive and representation of the local community on the Management Committee. In conclusion, ICOMOS recommends that the Property Management Plan be extended to cover the above issues and should include a research plan for industrial and underwater archaeology. In response to ICOMOS' third letter, the State Party has agreed to these actions and has provided a timetable for their implementation.

6 Monitoring

Monitoring indicators have been proposed covering protection, conservation, management and environmental protection. A chart is given in the nomination dossier setting out the indicators, monitoring time scale and responsible authority/agency. ICOMOS considers that

these need to be related to a complete data base of the property, covering all buildings, vacated sites, furniture and machinery. In response to ICOMOS' third letter, the State Party has advised that the data base will be completed by October 2015.

ICOMOS considers that the monitoring system should be related to a comprehensive data base of the property.

7 Conclusions

ICOMOS considers that the nominated property meets criteria (ii) and (iv) and conditions of integrity and authenticity. However given that a number of buildings have been made available for reuse by industrial enterprises and businesses, and alterations have been made to workers' housing, guidelines aimed at minimum intervention and compatibility with Liebig-Anglo structures are required in order to maintain integrity and authenticity. In response to ICOMOS' third letter the State Party has advised that such guidelines are being prepared and will be completed by the last trimester of 2016.

ICOMOS considers that the main threat to the property is fire. The boundaries of the nominated property and of its buffer zone are adequate. Legal protection in place is adequate for the property and buffer zone but would be improved by raising legislative protection of the entire buffer zone to the highest level. Comprehensive inventories need to be completed to form a basis for monitoring, conservation and maintenance, and a conservation management plan is required. ICOMOS notes that it is proposed to locate the Technological University on the site of the former Administration building which was burnt out and considers that archaeological investigation of the site and impact assessment is required (in accordance with Article 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*). The State Party has advised that this requirement will be included in the Management Plan by the first trimester of 2016. The archive section of the Museum is a valuable resource for research and presentation of the property, but it requires improved accommodation including security and environmental monitoring.

The local community within the nominated property and the town are involved as volunteers - guiding visitors and contributing to research. Residents are also involved with the industrial enterprises and social institutions accommodated within the property. The State Party has advised that the volunteers, local industrial enterprises and social organisations will be represented on the Anglo Management Committee.

ICOMOS considers that management of this large property is a challenge for the staff available and notes that the President of the Anglo Management Committee is the overall site manager. Special attention is needed for completion of inventories, comprehensive

conservation planning, archaeological investigation, guidelines and impact assessment of proposed interventions; risk preparedness; improved accommodation of the archive and representation of the local community on the Management Committee. The Property Management Plan needs to be extended to deal with all these issues and to include a research plan for industrial and underwater archaeology. The State Party has agreed to undertake these actions and a timetable has been provided.

ICOMOS considered that the name of the property should be changed to 'Fray Bentos Industrial Site'. However in response to ICOMOS' third letter the State Party wishes to name the property Fray Bentos Industrial Landscape, to which ICOMOS agrees.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Fray Bentos Industrial Landscape, Uruguay be inscribed on the World Heritage List on the basis of **criteria (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Located on land projecting into the Uruguay River west of Fray Bentos town, the industrial complex is marked by the enormous cold storage building and tall brick, boiler chimney which punctuate a range of saw-toothed roofs. Illustrating the whole process of meat sourcing, processing, packing and dispatch, the site includes buildings and equipment of the Liebig Extract of Meat Company which exported meat extract and corned beef to the European market from 1865 and the Anglo Meat Packing Plant which exported frozen meat from 1924. Here German research and technology combined with English enterprise to provide food for a global market including to the armies of two World Wars in the 20th century. Workers' housing and social institutions which accommodated and supported the cosmopolitan workers' community continue in use today.

Criterion (ii): Fray Bentos Industrial Landscape is evidence of the interchange of human values between European society and the South American population of the 19th and 20th century which effected social, cultural and economic changes in both places during that period. This was due the interchange on developments in technology which enabled the production and export of canned and frozen meat on a global scale and to the immigrant workers who arrived from more than 55 nations.

Criterion (iv): The ensemble of cattle pasture and handling facilities, industrial buildings, mechanical facilities, port facilities, residential fabric and green areas linking the river and agricultural areas to the city of Fray Bentos Industrial Landscape stands out as an example of early 20th century industrial development.

Integrity

The property includes all elements related to the history of the site and the period of its operation and is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. The landscape setting is appropriate in size and views from the river and town are maintained. Some buildings are in need of repair and conservation but the site does not suffer from neglect overall.

Authenticity

The property is authentic in terms of location and setting, materials and substance and use/function in terms of the buildings which form part of the Museum of Industrial Revolution. The archive contains historical documents with technical information providing a source for repairs and restoration. Other buildings have been adapted for new uses and workers' housing has been upgraded to provide more modern accommodation for families now living there, many of whom have a connection with the property through family members who worked there. Authenticity is vulnerable to proposed new development within the property including new uses for buildings and sites as well as new construction.

Management and protection requirements

The property is protected as a National Historic Landmark under the Heritage Act No. 14.040, August 1971 as amended in 2008 and the Regulatory Decree 536/72. Objects owned by government agencies and non-state corporations are protected under Act No. 17.473, 9 May 2002. The Acts are administered by the National Cultural Heritage Commission.

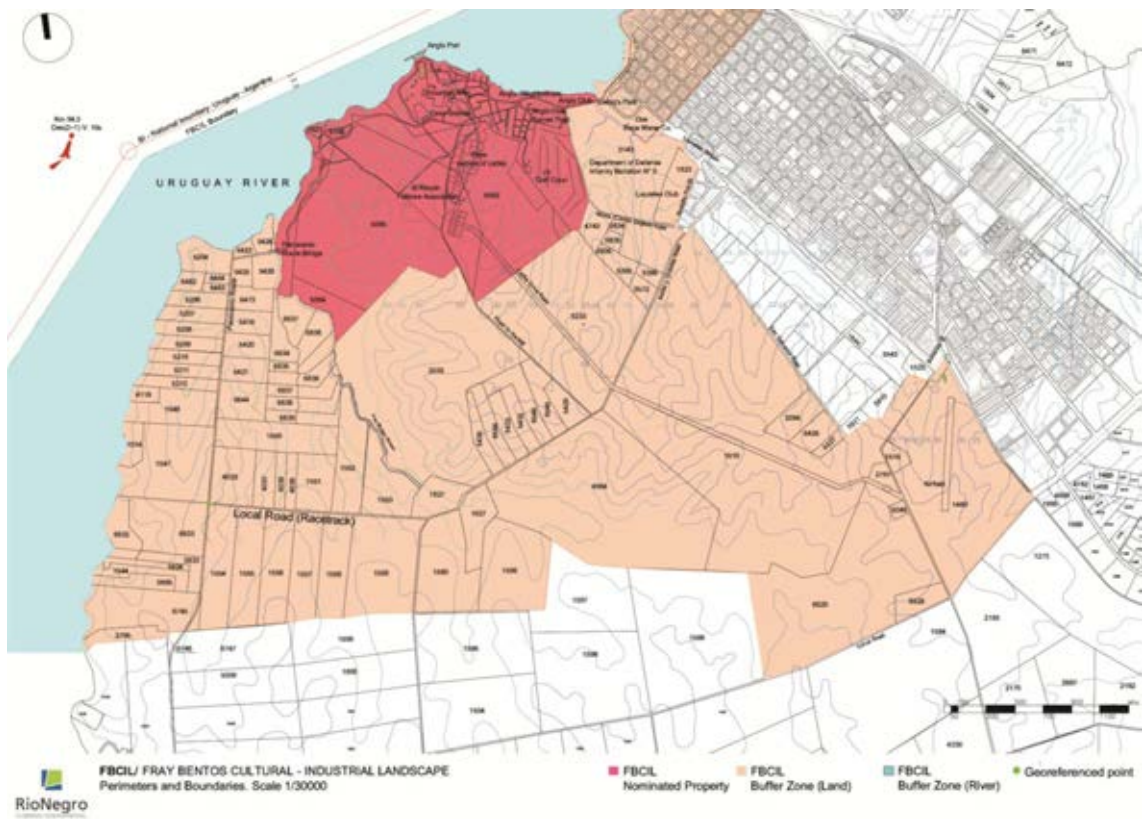
The property has been managed at site level by the Anglo Management Committee since 2008 with input from representatives of the Ministry of Culture and Educational Affairs; Ministry of Housing, Land Use Planning and Environment and the Municipality of Rio Negro. This body is responsible for the implementation of the Property Management Plan 2012-2015, which was approved by the National Cultural Heritage commission in January 2014.

Additional recommendations

ICOMOS recommends that the State Party give consideration to the following:

- Raising the legislative protection of the entire buffer zone to the highest level;
- Completing arrangements for representation of the volunteers, local industrial enterprises and social organisations on the Anglo Management Committee;

- Completing the Management Plan as proposed to include:
 - the inventory of the machinery;
 - the inventory/data base as a basis for monitoring and conservation and maintenance;
 - the research plan for industrial and underwater archaeology with provision for findings to be integrated into future management, education and interpretation;
 - the comprehensive conservation plan related to the inventory/database to deal with repair and maintenance needs;
 - provision for impact assessments of all new management planning proposals including new uses for existing buildings and new buildings within the site in line with Paragraph 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*;
 - guidelines for interventions to industrial and residential buildings;
 - extension of the monitoring system to relate to the inventory/database of the property.
- Submitting to the World Heritage Centre by 1 December 2016, a report on the implementation of the above-mentioned recommendations for examination by the World Heritage Committee at its 41st session in 2017.



Map showing the boundaries of the nominated property



Liebig-Anglo industrial complex circa 1930



Aerial view of the industrial complex



Internal view of the meat processing area



Anglo neighborhood – School