
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 Saltpeter 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.

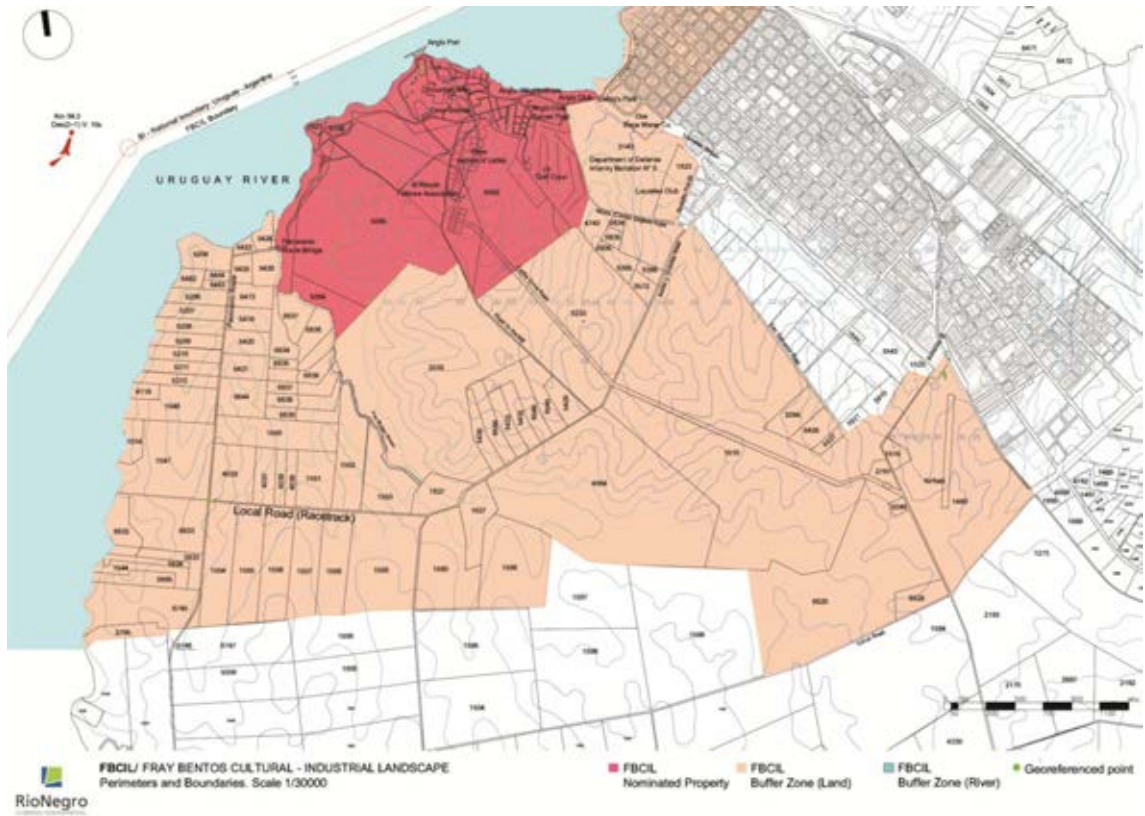
The property has been managed at site level by the Anglo Management Committee since 2008 with input from representatives of the Ministry of Culture and Educational Affairs; Ministry of Housing, Land Use Planning and Environment and the Municipality of Rio Negro. This body is responsible for the implementation 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

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 Saltpeter 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.

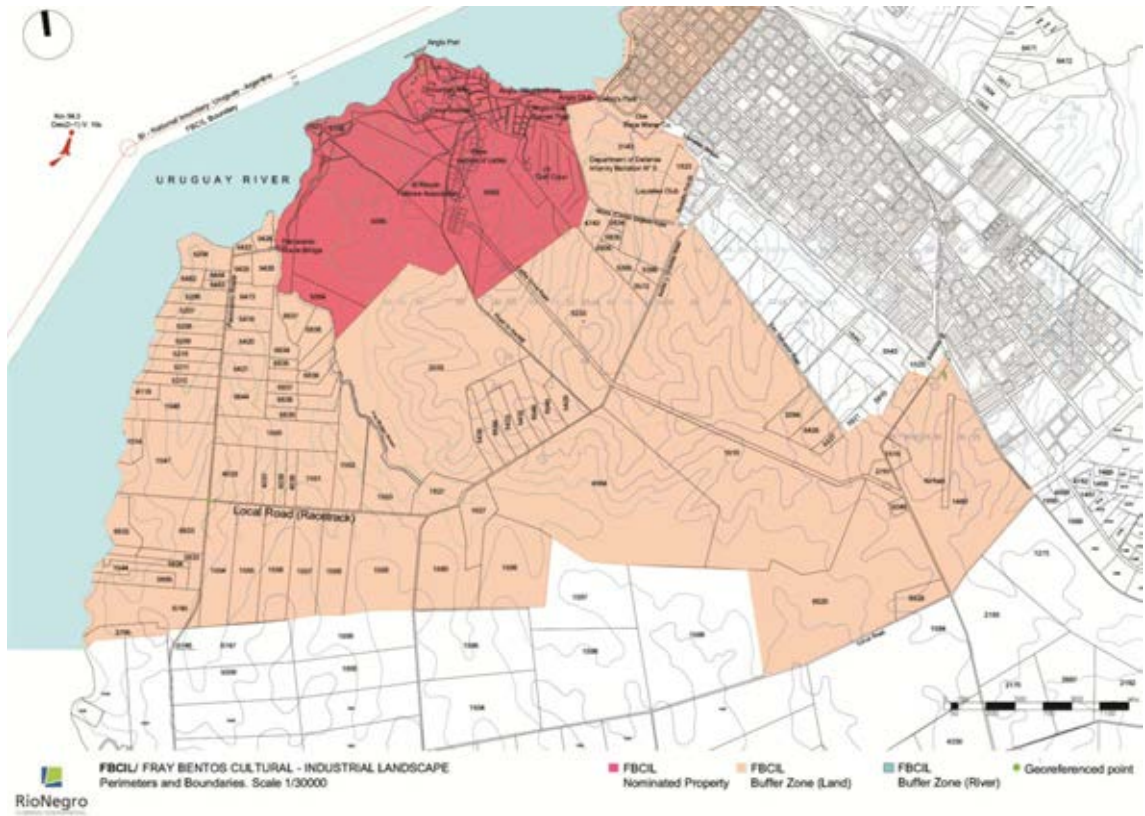
The property has been managed at site level by the Anglo Management Committee since 2008 with input from representatives of the Ministry of Culture and Educational Affairs; Ministry of Housing, Land Use Planning and Environment and the Municipality of Rio Negro. This body is responsible for the implementation 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

Fray Bentos (République orientale de l'Uruguay) No 1464

Nom officiel du bien tel que proposé par l'État partie
Paysage industriel de Fray Bentos

Lieu

Département de Río Negro
Région occidentale de l'Uruguay
République orientale de l'Uruguay

Brève description

Situé sur le fleuve Uruguay, à l'ouest de la ville, le complexe industriel de Fray Bentos provient du développement d'une usine de salaison de viandes fondée en 1859 dans le but de capitaliser sur l'élevage de bétail qu'abritaient les immenses prairies du bassin fluvial de l'Uruguay, du Paraná et du Río de la Plata. Illustrant toute la chaîne de la viande – approvisionnement, transformation, emballage et expédition –, le site comprend des bâtiments et des équipements de la Liebig Extract of Meat Company, qui exporta du concentré de viande et du *corned-beef* sur le marché européen à partir de 1865, et de la Anglo Meat Packing Plant, qui exporta de la viande surgelée à partir de 1924. Ici, la recherche et la technologie allemandes se sont associées à l'initiative anglaise pour fournir en nourriture le marché mondial, y compris les armées ayant pris part aux deux guerres mondiales qu'a connues le XXe siècle. Les logements du personnel et les institutions sociales qui accueillaient et aidaient la communauté cosmopolite des ouvriers demeurent en usage aujourd'hui.

Catégorie de bien

En termes de catégories de biens culturels, telles qu'elles sont définies à l'article premier de la Convention du Patrimoine mondial de 1972, il s'agit d'un *site*.

Aux termes des *Orientations devant guider la mise en œuvre de la Convention du patrimoine mondial* (juillet 2013), paragraphe 47, il s'agit d'un *paysage culturel*.

1 Identification

Inclus dans la liste indicative

1^{er} février 2010

**Assistance internationale au titre du
Fonds du patrimoine mondial pour la préparation de
la proposition d'inscription**
2012

Date de réception par le Centre du patrimoine mondial
15 janvier 2014

Antécédents

Il s'agit d'une nouvelle proposition d'inscription. Une mission consultative de l'ICOMOS s'est rendue sur le site du 25 au 28 février 2013 (étape 1) et du 23 au 26 juillet 2013 dans le cadre des processus en amont. Le rapport de la mission, daté d'août 2013, figure dans le dossier de proposition d'inscription (annexe II). Il parvenait à la conclusion que, globalement, le bien présentait des arguments solides en faveur de son inscription sur la Liste du patrimoine mondial.

Consultations

L'ICOMOS a consulté le TICCIH et plusieurs experts indépendants.

Mission d'évaluation technique

Une mission d'évaluation technique de l'ICOMOS s'est rendue sur le bien du 8 au 12 septembre 2014.

Information complémentaire reçue par l'ICOMOS

Une lettre a été envoyée à l'État partie le 21 août 2014 pour demander une carte établissant le rapport entre les délimitations du bien proposé pour inscription et les caractéristiques identifiées de celui-ci pour l'époque Liebig-Anglo, ainsi que des éclaircissements concernant les attributs ; il a été également demandé si le plan de gestion avait été approuvé et, si ça n'était pas le cas, de fournir un calendrier d'approbation. Une deuxième lettre a été envoyée le 19 septembre 2014 pour demander des précisions quant à l'inventaire et un approfondissement de l'analyse comparative. Une troisième lettre a été envoyée à l'État partie après la réunion de la Commission du patrimoine mondial de l'ICOMOS en décembre 2014 concernant le changement de nom du bien, la nomination d'un responsable de la gestion du site, la représentation au comité de gestion et l'élargissement du plan de gestion à diverses questions. Une quatrième lettre a été envoyée à l'État partie le 13 janvier 2015 à propos du niveau de protection de la zone tampon et de l'inclusion d'une stratégie de préparation aux risques. La réponse à la première lettre a été reçue le 21 octobre 2014 et à la deuxième le 5 novembre 2014. La réponse aux troisième et quatrième lettres a été reçue le 28 février 2015. Ces informations ont été incluses ci-dessous.

Date d'approbation de l'évaluation par l'ICOMOS

12 mars 2015

2 Le bien

Description

Le paysage industriel de Fray Bentos couvre une zone de 273,8 ha et est entouré d'une zone tampon de 2 127,7 ha.

Installations industrielles

Situé sur une avancée de terre sur le fleuve Uruguay, le complexe industriel s'étend vers l'arrière-pays depuis la

zone de quai, offrant une variété de toits en dents de scie d'où se détachent l'énorme entrepôt frigorifique et la haute cheminée en briques. C'est le port naturel qui a d'abord attiré la Liebig Extract of Meat Company, exportatrice de concentré de viande et de *corned-beef* à destination du marché européen à partir de 1865, puis, à partir de 1924, la Anglo Meat Packing Plant, exportatrice de viande surgelée. Des scientifiques allemands ont apporté des machines et des outils depuis l'Écosse et ont mis au point une technologie de transformation de la viande sur le site de Fray Bentos, et ont également développé la recherche en matière d'élevage bovin, devenue un modèle pour d'autres régions du monde.

Le complexe industriel est entouré de terres fertiles d'excellente qualité, propices à l'élevage de bétail et à la production agricole, et donc à la fourniture des matières premières. Les principaux bâtiments illustrant les processus industriels jusqu'à l'époque de la fermeture de l'usine, en 1979, comprennent la salle des machines, le département d'extraction de viande, l'abattoir/aire de transformation des abats, la salle d'équarrissage, l'entrepôt frigorifique et le département Conserves. Ils sont reliés par des routes intérieures, des convoyeurs et des tunnels aériens empruntés par les ouvriers et par les produits ; ils abritent toujours les machines qui étaient présentes en 1979. L'alimentation de la chaufferie est assurée par des générateurs de vapeur au fuel, parmi lesquels quatre datent de 1906 et six de 1922. Les bâtiments restants de l'époque Liebig sont en briques, avec des toits en feuilles de zinc ou en tuiles (d'ardoise) surmontant des structures en fonte ou en bois. Ceux de l'époque Anglo (années 1920) incluent le grand entrepôt frigorifique et la salle des machines, abritant le compresseur à ammoniac nécessaire pour la réfrigérer. Ils ont été construits au moyen de structures préfabriquées en acier importées d'Angleterre, avec des sols et des murs en dalles de béton. On atteint le complexe depuis l'arrière-pays par Cattle Drive Road, la route par où l'on conduisait le bétail aux enclos et au quartier de l'abattoir.

Zone résidentielle

Les logements du personnel se situent à l'est du complexe industriel ; ils incluent la demeure du tout premier directeur et les bureaux administratifs, les logements des techniciens et des maisons individuelles pour des familles se distinguant par des toits en tuiles françaises, ainsi que des rangées de logements pour hommes seuls reconnaissables à leurs toits en tôle ondulée. La zone se caractérise par la présence de végétation composée d'une flore indigène alliée à des plantes exotiques rapportées d'Asie, d'Afrique et d'Europe par le personnel anglais de la société. Elle comprend une cafétéria, des clubs sociaux, des structures sportives (dont un terrain de golf), un hôpital et une école. Au sud des installations industrielles se dresse la maison de maître Casa Grande, avec un grand jardin et une position en surplomb lui conférant une belle vue sur la zone industrielle. Elle fut construite par l'ingénieur Georg Giebert, premier directeur de l'usine en 1868.

Ville de Fray Bentos

Elle ne fait pas partie du bien proposé pour inscription, et est séparée du bien industriel par le Laureles, cours d'eau qui se jette dans le fleuve Uruguay depuis le sud. Cependant, le quartier nord-ouest de la ville, qui s'étend sur six pâtés de maisons depuis l'Uruguay et fut le premier à être peuplé, est inclus dans la zone tampon. Fondée en 1859 sous le nom de Villa Independencia, la ville se développa parallèlement aux entreprises industrielles, leur fournissant ressources humaines et services indispensables. Conçue selon un plan en échiquier orienté du nord-ouest au sud-est et incluant des parcs, son architecture urbaine épouse les styles européens de la période et reste de petite échelle.

Histoire et développement

Avant 1865, les terrains sur lesquels se trouve le bien proposé pour inscription étaient un grand ranch à bétail espagnol, que l'ingénieur allemand Georg Giebert racheta en 1863 pour établir son entreprise d'extraction de viande sur le port naturel où le propriétaire foncier anglais Richard Hughes avait construit une usine de salaison de viandes en 1859.

De 1865 à 1924, Giebert fit prospérer la Liebig Extract of Meat Company Limited (LEMCO), produisant du concentré de viande et du *corned-beef* grâce à la méthode inventée par le chimiste allemand Justus von Liebig. Ces produits constituèrent une grande part du régime alimentaire des troupes durant la Première Guerre mondiale. Parmi les autres produits exportés, on trouvait de l'engrais organique, remplaçant le guano péruvien. L'immigration fut encouragée, afin d'alimenter la force de travail ; on construisit des logements ainsi que des infrastructures sociales et sportives pour les employés, et l'enseignement de l'anglais fut instauré. Une coopérative de travailleurs vit le jour.

En 1924, le groupe anglais Vestey racheta l'entreprise, Liebig ayant abandonné Fray Bentos pour regrouper ses activités en Argentine et au Paraguay.

Les années 1925-1950 se caractérisent par le développement du conditionnement de la viande, et plus particulièrement des conserves, en réponse à la demande du marché européen durant la Seconde Guerre mondiale. La Anglo Meat Packing Plant fournissait du travail à 5 000 personnes alors que Fray Bentos comptait 12 000 habitants. L'immigration s'accrut, allant jusqu'à réunir cinquante nationalités différentes. La colonie anglaise accueillait près de soixante-dix familles ; c'est à cette époque qu'elle fut dotée d'un parcours de golf encore intact aujourd'hui.

La période entre 1950 et 1979 fut une ère de déclin pour l'entreprise de Fray Bentos, dont les produits connurent une baisse de la demande du fait de la fin de la guerre. La croissance démographique de Montevideo y attira l'industrie et les travailleurs, et les questions qui surgirent en Grande-Bretagne, à la suite d'une épidémie de typhus, sur les méthodes de refroidissement de l'eau à Fray

Bentos et dans d'autres usines sud-américaines de transformation de la viande contribuèrent à la réduction de la production. Anglo commença à concentrer sa production à Buenos Aires, et le gouvernement uruguayen dut intervenir pour maintenir le site de Fray Bentos en activité. D'autres entreprises tentèrent par la suite de reprendre le flambeau mais en vain, et le site finit par être abandonné en 1985.

Depuis lors, une partie du site est devenu le musée de la Révolution industrielle (en 2005) et une autre le Parc industriel municipal, où vingt-deux entreprises ont donné une nouvelle vie aux bâtiments. Dix-neuf organisations sociales et culturelles y sont aussi logées. Certains descendants/proches des ouvriers de l'ancienne usine vivent encore dans le quartier résidentiel et dans la ville ; ils sont la source de l'histoire orale du site.

3 Justification de l'inscription, intégrité et authenticité

Analyse comparative

La préface du dossier de proposition d'inscription souligne que le GRULAC (groupe Amérique latine et Caraïbes) a convenu, à la suite d'une analyse fouillée de sa viabilité, de ses caractéristiques et de son histoire, que le paysage culturel industriel de Fray Bentos était le plus représentatif d'une étape majeure dans le développement historique du continent américain. L'analyse comparative fournie par l'État partie traite de plusieurs autres sites industriels d'Amérique du Sud, notamment des sites de conditionnement de viande comme l'usine Pueblo Liebig à Colón, en Argentine, et Puerto Bories en Patagonie chilienne. Elle démontre que tous deux étaient relativement isolés, avec une production et une portée mondiale bien inférieures à celles de Fray Bentos, quoiqu'ils partagent des points communs en termes de fourniture de logements et d'infrastructures aux travailleurs. Le bien proposé pour inscription est également comparé à Conchillas, en Uruguay, une entreprise d'extraction de pierre et de sable dont les produits servirent à la construction du port de Buenos Aires à la fin du XIXe siècle. Certes, elle fournissait aussi logements et infrastructures à son personnel, mais elle eut une existence assez courte.

Le bien a été comparé à des biens inscrits sur la Liste du patrimoine mondial : Sewell, au Chili [2006, (ii)], ville minière de l'industrie du cuivre ; et Blaenavon, au Royaume-Uni [2000, (iii) et (iv)], à la fois usine et ville sidérurgique. Outre la diversité des processus industriels que représentent ces sites ainsi que leurs situations géographiques et topographiques contrastées, on argue que Fray Bentos se distingue nettement en ce qu'il incarne une industrie ouverte sur un marché mondial et une communauté ouvrière cosmopolite à laquelle la société offrit des infrastructures sociales exceptionnelles. L'ICOMOS considère que le bien proposé pour inscription pourrait aussi être comparé aux usines de salpêtre de Humberstone et de Santa Laura, au Chili [2005, (ii), (iii) et (iv)], inscrites sur la Liste du

patrimoine mondial, où le développement des mines de salpêtre et des villes minières entre 1872 et le milieu du XXe siècle fut porté par un marché mondial pour cette production d'engrais agricoles et impliquait la venue de travailleurs immigrés d'Amérique du Sud et d'Europe, d'où il résulta un échange de valeurs culturelles et le développement de syndicats ouvriers. Toutefois, le site de Fray Bentos représente une autre catégorie d'industrie du début du XXe siècle – la production alimentaire pour un marché à l'échelle mondiale dépendant des échanges internationaux en termes de recherche et de technologie.

L'ICOMOS note qu'il existait d'immenses usines de transformation et de réfrigération de la viande en Australie et en Nouvelle-Zélande à la même époque, notamment, en Nouvelle-Zélande, l'usine de Waitara, de la société britannique Borthwicks, sur North Island, et celle de Belfast (Canterbury) sur South Island ; en Australie, à Portland (Victoria), Brooklin (Victoria), ainsi que l'usine Moreton de Queensland, parmi lesquelles certaines avaient leur propre port et où la compagnie était également propriétaire de ranchs. Aucune de celles-ci n'a fait l'objet d'investigations pour savoir ce qui reste aujourd'hui de ces établissements. Toutefois, on lit dans *Borthwicks A Century in the Meat Trade (1863-1963)* que l'Amérique du Sud fut le premier fournisseur de viande pour l'Europe pendant la première partie du XXe siècle.

Les vestiges des bâtiments qui abritaient la conserverie de viande et le site de réfrigération à Maribyrnong, près de Melbourne, sont inscrits à l'Inventaire du patrimoine victorien, et comme tels protégés : la Melbourne Meat Preserving Company fut un pionnier de la conservation de viande sous vide, et la Australian Frozen Meat Export Company en matière de congélation en vrac, avec à son crédit la première exportation réussie de viande surgelée dans le monde. Toutefois, le site ne présente pas les processus dans une mesure comparable à Fray Bentos, et n'inclut pas de territoire d'élevage de bétail, de logements ouvriers ou d'institutions sociales.

La société Vestey possédait des ranchs dans le nord de l'Australie et une grande usine de viande à Darwin, mais qui ne fonctionna que pendant trois ans (1917-1920) et dont seul le réservoir d'eau subsiste aujourd'hui. D'après les photographies, sa disposition était très similaire à celle de l'époque Vestey de Fray Bentos.

Les informations complémentaires reçues de l'État partie en réponse à la deuxième lettre de l'ICOMOS déclarent que la Australian Meat Company (1823-1914), fondée à Londres par Charles Grant Tindal, un éleveur de bétail et entrepreneur sur le marché des conserves alimentaires en Australie, utilisait le procédé de Liebig pour produire du concentré de viande à Ramornie, en Nouvelle-Galles du Sud, Australie, et exporta de grandes quantités de conserves de viande en Angleterre à partir de 1866. L'ICOMOS note que la société fut ensuite vendue à la Kensington Meat Preserving Co. en 1915, et l'usine démolie aux alentours de 1920.

L'État partie met aussi l'accent sur l'entreprise de conditionnement de viande de Phillip Danforth Armour de Chicago, qui partageait des informations technologiques avec la Liebig Company à la fin du XIXe siècle. La Armour Company faisait partie du complexe industriel des Union Stock Yards, au cœur de l'industrie de conditionnement de viande américaine, où les animaux étaient abattus, transformés et conditionnés en vue du transport ferroviaire. L'ICOMOS note que la décentralisation de l'industrie entraîna l'abandon des Yards dans les années 1950. Une partie de la zone devint le Stockyards Industrial Park en 1971, tandis que la partie plus reculée continuait d'abriter une population immigrée florissante. Les Yards devinrent célèbres dans la littérature américaine et la culture populaire mais, excepté la grande porte d'entrée, aujourd'hui Site historique officiel, il ne reste pas grand-chose de cet établissement industriel, jadis énorme.

L'ICOMOS considère que l'analyse comparative, si elle n'est pas exhaustive, a néanmoins établi que Fray Bentos se démarquait en ce qu'il conservait tous les témoignages nécessaires pour illustrer cette entreprise mondiale de production alimentaire, des pâtures au port en passant par l'usine de transformation.

L'ICOMOS considère que l'analyse comparative justifie d'envisager l'inscription de ce bien sur la Liste du patrimoine mondial.

Justification de la valeur universelle exceptionnelle

Le bien proposé pour inscription est considéré par l'État partie comme ayant une valeur universelle exceptionnelle en tant que bien culturel pour les raisons suivantes :

- Il est représentatif d'une industrie à la pointe de la technologie et d'une portée mondiale grâce à l'échange international de technologie et de recherche.
- L'exploitation des avantages naturels du lieu considéré y fut exceptionnelle.
- Il représente la communauté cosmopolite de travailleurs qui servit de terreau à la société uruguayenne en général.
- Il incarne un siècle d'évolution économique et sociale d'origine industrielle en Amérique du Sud, jusqu'aux années 1970.

L'ICOMOS considère que cette justification est appropriée car le bien se démarque dans l'illustration de tout le processus de l'approvisionnement, de la transformation, du conditionnement et de l'expédition de viande sur un seul et même site au début du XXe siècle, qui ne fut possible que grâce à sa localisation, combinant l'élevage excellent du pays et des installations portuaires, mais aussi à l'introduction de l'expertise et de la recherche allemandes, et la communauté ouvrière immigrée.

Intégrité et authenticité

Intégrité

Le bien proposé pour inscription réunit tous les éléments relatifs à l'histoire du site et à sa période de fonctionnement ; il est d'une taille suffisante pour garantir la représentation complète des caractéristiques et des processus significatifs de son importance. Dans la zone industrielle, les bâtiments principaux et les installations complémentaires sont préservés. Certains (salle des machines, aire d'extraction de la viande et aire d'équarrissage) conservent une grande partie des équipements intérieurs d'origine, illustrant le processus de production et le rôle des infrastructures. Certains bâtiments sont réutilisés par des entreprises industrielles ; d'autres se sont beaucoup détériorés, notamment l'entrepôt réfrigéré et la chaufferie. Les traces des bâtiments disparus durant la période historique (stockage des peaux, usines de tissage ; entrepôt à caisses/bois et de douanes) suffisent à une compréhension du système en son entier. Les logements des quartiers ouvriers de différentes périodes sont préservés, mais souvent après plusieurs interventions, dont certaines ont appauvri l'aspect de certains secteurs. Certaines infrastructures, dont l'hôpital et l'école, conservent leur usage d'origine. Le cadre paysager est de dimensions appropriées et les vues depuis le fleuve et la ville ont été préservées.

Authenticité

Le bien est authentique en termes de situation et de cadre, de matériaux et de substance ainsi que d'usage et de fonction en ce qui concerne les bâtiments faisant partie du musée de la Révolution industrielle. Les archives renferment des documents historiques dans lesquels des informations techniques étayent les travaux de réparation et de restauration. D'autres bâtiments ont été adaptés à de nouveaux usages et les logements ouvriers ont été améliorés pour offrir un confort plus moderne aux familles qui y vivent aujourd'hui, dont beaucoup entretiennent un lien avec le bien à travers leurs membres qui y ont travaillé. L'ICOMOS considère que l'authenticité du bien est vulnérable aux projets de nouveaux développements prévus sur celui-ci, notamment de nouveaux usages pour les bâtiments et sites ainsi que de nouvelles constructions. Une étude de leur impact devrait être entreprise pour les interventions envisagées, conformément au paragraphe 110 des *Orientations devant guider la mise en œuvre de la Convention du patrimoine mondial*.

L'ICOMOS considère que les conditions d'intégrité et d'authenticité sont remplies.

Critères selon lesquels l'inscription est proposée

Le bien est proposé pour inscription sur la base des critères culturels (ii), (iv) et (vi).

Critère (ii) : *témoigner d'un échange d'influences considérables pendant une période donnée ou dans une aire culturelle déterminée, sur le développement de l'architecture ou de la technologie, des arts monumentaux, de la planification des villes ou de la création de paysages ;*

Ce critère est justifié par l'État partie au motif principal que le site témoigne de l'échange de valeurs culturelles entre la société européenne et la population sud-américaine des XIXe et XXe siècles, source de changements sociaux, culturels et économiques sur les deux continents à cette époque, en grande partie du fait de la population de travailleurs immigrés en provenance de plus de 55 pays différents.

L'ICOMOS considère que l'alliance de la recherche et de la technologie allemandes, des atouts naturels du lieu et de l'initiative anglaise fut à la base de l'important échange autour des progrès technologiques, comme l'illustrent les bâtiments et les machines qui favorisèrent la production et l'exportation à l'échelle mondiale de viandes en conserves et surgelées.

L'ICOMOS considère que ce critère a été justifié.

Critère (iv) : *offrir un exemple éminent d'un type de construction ou d'ensemble architectural ou technologique ou de paysage illustrant une ou des période(s) significative(s) de l'histoire humaine ;*

Ce critère est justifié par l'État partie au motif que l'ensemble des pâturages et des installations pour le bétail, des bâtiments industriels, des installations mécaniques, des installations portuaires, du tissu résidentiel et des espaces verts reliant le fleuve et les zones agricoles à la ville se démarque en tant qu'exemple de développement industriel du début du XXe siècle.

L'ICOMOS considère que la combinaison du lieu, de l'ensemble industriel, des logements et des institutions sociales permet de comprendre tout le processus d'une production de viande d'envergure mondiale, et que le site illustre de façon remarquable les facteurs technologiques, sociaux et culturels.

L'ICOMOS considère que ce critère a été justifié.

Critère (vi) : *être directement ou matériellement associé à des événements ou à des traditions vivantes, des croyances ou des œuvres artistiques et littéraires ayant une signification universelle exceptionnelle ;*

Ce critère est justifié par l'État partie au motif que le site est associé à des idées et des recherches à la source d'amélioration des races de bétail et de progrès techniques qui ont permis notamment la production de concentré de viande, ce qui à son tour eu une influence notable sur le régime alimentaire et la nutrition au niveau international.

L'ICOMOS considère que ces idées ne justifient pas une importance universelle exceptionnelle.

L'ICOMOS considère que ce critère n'a pas été justifié.

L'ICOMOS considère que le bien proposé pour inscription répond aux critères (ii) et (iv) et remplit les conditions d'authenticité et d'intégrité.

Description des attributs de la valeur universelle exceptionnelle

Les attributs exprimant la valeur universelle exceptionnelle du bien sont sa situation et son environnement entre le fleuve Uruguay et l'arrière-pays agricole adjacent à la ville de Fray Bentos ; les bâtiments, les sites et les machines illustrant toute la chaîne des usines de la viande, de l'élevage du bétail à l'expédition par bateau du produit final en passant par la transformation ; le quartier résidentiel, la demeure et le jardin du directeur, et les bâtiments et les sites abritant les institutions sociales.

4 Facteurs affectant le bien

L'installation en 2009 des équipements du Uruguay Pulp Mill à l'ouest du bien proposé pour inscription est mentionnée dans le dossier de proposition d'inscription comme ayant un impact potentiel en termes de pressions liées au développement et à l'environnement. Toutefois, celles-ci ont atteint leur maximum en 2010 et ne sont plus aujourd'hui considérées comme une menace. Le dossier de proposition d'inscription consigne aussi les pressions, en termes d'augmentation de la densité urbaine à l'intérieur du bien, de la part des promoteurs argentins, se servant des zones vides et érodées pour construire des résidences de villégiature. D'autres propositions incluent l'installation d'établissements d'enseignement supérieur sur le site. Toutes sont soumises à des contrôles dus au classement du bien en tant que site historique national.

Le bien n'est pas sujet aux inondations, mais l'éventuel impact du changement climatique n'a pas été considéré. Néanmoins, la municipalité a fourni des entrepôts pour y stocker en urgence les biens mobiliers en cas d'inondation. Aucune activité sismique n'a jamais été enregistrée. Face à des prévisions de vents forts et de rafales, des précautions sont prises, suivies d'inspections de maintenance et de réparations. Les menaces d'incendie sont sous la responsabilité du département officiel de lutte contre les incendies situé dans la partie urbaine de la zone tampon, associé à des pompiers bénévoles. Des investigations sont en cours dans l'idée de réactiver l'infrastructure historique des pompiers sur le bien. Les bâtiments qui accueillent actuellement l'activité industrielle sont conformes aux réglementations municipales en termes d'équipement de lutte contre le feu.

Le bien proposé pour inscription comptait 785 résidents il y a deux ans. Le nombre de visiteurs annuel est approximativement de 18 000-20 000. Le plan local inclut

des restrictions à l'expansion de la station balnéaire située au sud de la zone tampon du bien proposé pour inscription, en prévision d'une possible augmentation de l'affluence due à l'inscription sur la Liste du patrimoine mondial si celle-ci était approuvée.

L'ICOMOS considère que la conversion des bâtiments industriels en vue de nouvelles utilisations, les transformations des logements ouvriers et la construction de nouvelles installations telles que des établissements d'enseignement supérieur sur les sites inoccupés doivent être guidées par des normes précises, visant une intervention minimale et la compatibilité avec les structures Liebig-Anglo, dans un souci de préservation de l'intégrité et de l'authenticité. Les sites inoccupés doivent aussi faire l'objet de fouilles archéologiques. Les propositions d'intervention nécessitent une étude d'impact conforme au paragraphe 110 des *Orientations devant guider la mise en œuvre de la Convention du patrimoine mondial*. En réponse à la troisième lettre de l'ICOMOS, l'État partie a accepté ce principe.

L'ICOMOS considère que les principales menaces pesant sur le bien sont les risques d'incendies et d'inondations.

5 Protection, conservation et gestion

Délimitations du bien proposé pour inscription et de la zone tampon

La délimitation du bien proposé pour inscription a été fixée de façon à inclure toutes les zones liées à la production industrielle de Liebig-Anglo, y compris les quartiers résidentiels, les enclos à bétail et les routes, ainsi que les zones d'intérêt archéologique potentiel. La délimitation est clairement définie et englobe la zone protégée par la législation existante. La zone tampon est d'une taille suffisante pour que soient préservées les vues importantes et offre une protection supplémentaire au titre des réglementations de planification locale.

L'ICOMOS considère que les délimitations du bien proposé pour inscription et de la zone tampon sont appropriées.

Droit de propriété

L'État possède près de 80 % du bien proposé pour inscription. Le reste appartient à des propriétaires privés.

Le secteur fluvial de la zone tampon appartient à l'État, quoique différentes agences gouvernementales s'en partagent la juridiction. La ville comprend à la fois des bâtiments municipaux, des espaces publics et des bâtiments et terrains privés.

Protection

Le bien proposé pour inscription est protégé en tant que site historique national en vertu de la loi sur le patrimoine n° 14.040 d'août 1971, telle que modifiée en 2008, et du décret réglementaire 536/72. Les biens appartenant aux

agences gouvernementales et à des entreprises privées sont protégés au titre de la loi n° 17.473 du 9 mai 2002. Ces lois sont administrées par la Commission sur le patrimoine culturel national, sous l'égide et la direction du ministère des Transports et des Travaux publics. Elle réunit des représentants du ministère des Transports et des Travaux publics, de l'Université de la République et d'autres institutions, dont les Conseils de la Bibliothèque nationale et du musée de l'Histoire nationale.

La zone tampon en général ne bénéficie pas encore de protection juridique à ce niveau, bien que certains bâtiments dans la zone de fondation de la ville de Fray Bentos soient classés monuments historiques nationaux. Toutefois, elle est entièrement protégée par les règlements de planification locale. En réponse à la quatrième lettre de l'ICOMOS, l'État partie a indiqué que la partie urbaine de la zone tampon serait complètement protégée en tant que monument historique national d'ici avril 2015. Le patrimoine archéologique est protégé en vertu de la loi n° 14.040 et du décret 526/72 pour le patrimoine terrestre, et de la loi n° 14.343 et du décret 692/86 pour le patrimoine sous-marin.

L'ICOMOS considère que la protection est efficace.

L'ICOMOS considère que la protection juridique du bien et de la zone tampon est appropriée. Toutefois, l'ICOMOS estime que la protection juridique de la zone tampon dans son ensemble gagnerait à être portée au plus haut niveau de protection disponible, ainsi que l'État partie l'a accepté.

Conservation

Selon le dossier de proposition d'inscription, la compilation d'un inventaire pour le bien proposé pour inscription, incluant les machines et les équipements, est en cours et sera finalisée prochainement. Les informations complémentaires communiquées par l'État partie en réponse à la deuxième lettre de l'ICOMOS indiquent que 30 % des bâtiments de la zone industrielle restent à inventorier, ce qui sera fait d'ici à janvier 2015, et que 80 % des machines et des équipements industriels seront inventoriés d'ici à mars 2015. Des extraits de l'inventaire ont été fournis à titre d'exemple. Un inventaire de la zone de fondation de la ville de Fray Bentos (composant de la zone tampon) a d'ores et déjà été dressé. Des fouilles archéologiques sous-marines sont en cours dans le secteur fluvial de la zone tampon. La partie rurale de la zone tampon reste à étudier.

L'ICOMOS note que l'inventaire devrait inclure les logements ouvriers, les enclos à bétail, la résidence du directeur et la station de pesage, et qu'une base de données exhaustive couvrant les matériaux, les sites désaffectés, le mobilier et les machines, sur laquelle le suivi, la conservation et l'entretien pourront s'appuyer est nécessaire. Certains édifices importants, notamment l'entrepôt frigorifique et la salle d'équarrissage, nécessitent des travaux d'urgence.

Les bâtiments faisant partie de l'itinéraire touristique culturel ont été réparés et préservés, avec des travaux allant du simple nettoyage à la restauration. Les autres bâtiments du bien proposé pour inscription sont à l'étude, afin d'établir les mesures de conservation nécessaires.

L'ICOMOS note que les projets d'intervention sont liés aux nouveaux usages des bâtiments au lieu d'être prévus dans le cadre d'une stratégie globale de conservation et d'entretien préventifs. L'ICOMOS considère qu'il est nécessaire d'établir un plan exhaustif de gestion de la conservation associé à un inventaire complet. En réponse à la troisième lettre de l'ICOMOS, l'État partie a fourni de plus amples informations sur les progrès des inventaires et a indiqué que la conservation et l'entretien seraient associés à ces derniers.

L'ICOMOS note que des inventaires sont en cours de réalisation pour servir de bases au suivi, à la conservation et à l'entretien, et considère qu'un plan exhaustif de gestion de la conservation est nécessaire dans le cadre du plan de gestion.

Gestion

Structures et processus de gestion,
y compris les processus de gestion traditionnels

Le bien proposé est administré à l'échelon du site par le comité de gestion Anglo depuis 2008, avec la contribution des représentants du ministère de la Culture et de l'Éducation, du ministère du Logement, de l'Urbanisme et de l'Environnement ainsi que de la municipalité de Río Negro. Cette instance est responsable de la mise en œuvre du plan de gestion du bien. La préparation aux risques n'est pas spécifiquement prise en compte, bien que des mesures soient en place, comme indiqué ci-dessus à la rubrique « Facteurs affectant le bien ». Les ressources financières sont issues du plan budgétaire quinquennal de la municipalité de Río Negro (2011-2015 actuellement), qui reçoit des fonds provenant du gouvernement central ainsi que de ses propres mesures fiscales. L'expertise est apportée par le personnel de la municipalité de Río Negro, la Commission du patrimoine culturel et l'université de la République. Les informations fournies par le comité de gestion Anglo à la mission de l'ICOMOS indiquent que le musée de la Révolution industrielle compte du personnel technique dans quatre départements : Conservation (4) ; Éducation et Information (3) ; Administration et Étude culturelle (2) ; Documentation (5). On envisage d'implanter l'université technologique dans la zone industrielle du bien proposé pour inscription ; elle comprendra des services de formation pour le personnel et les bénévoles. L'ICOMOS note qu'on envisage d'installer l'université sur le site de l'ancien bâtiment de l'administration, et considère qu'une étude archéologique de celui-ci et une étude d'impact sur le patrimoine s'imposent.

Cadre de référence : plans et mesures de gestion,
y compris la gestion des visiteurs et la présentation

Le plan local et la zone d'influence de Fray Bentos mis en place par la municipalité de Río Negro protègent et guident l'occupation des sols et le développement dans la zone étendue de Fray Bentos, d'une superficie de 26 800 ha. C'est particulièrement pertinent par rapport à l'amélioration des logements et à l'accessibilité dans le bien proposé pour inscription. Le plan de gestion du bien 2012-2015 a été approuvé par la Commission du patrimoine culturel national le 2 janvier 2014. Il inclut des études de structures et de faisabilité quant aux nouveaux usages des bâtiments existants, la finalisation de l'inventaire, des études sur l'état de telle ou telle partie, un projet d'histoire orale, la numérisation des archives Liebig-Anglo, de la recherche, un plan de conservation des bâtiments et diverses propositions sur l'interprétation du bien à destination des visiteurs. L'ICOMOS considère qu'il devrait être élargi, afin d'inclure une stratégie de préparation aux risques d'incendies et d'inondations, ainsi que des directives pour les fouilles archéologiques et les études d'impact liées aux propositions d'intervention. En réponse aux troisième et quatrième lettres de l'ICOMOS, l'État partie a accepté de s'atteler à cette tâche et a indiqué que la stratégie de préparation aux risques serait prête d'ici à décembre 2015.

Le musée de la Révolution industrielle organise des visites guidées de la zone industrielle effectuées par des bénévoles locaux depuis 1990. On envisage de les étendre à d'autres aspects du site, notamment le secteur réservé au bétail ou encore les logements et la vie sociale des ouvriers – avec peut-être un musée de l'immigration – ainsi que le paysage et les caractéristiques naturelles du site. On prévoit que le développement de l'interprétation du bien à destination des visiteurs nécessitera des fonds, qu'il faudra trouver dans le secteur privé. L'ICOMOS note que la section des archives est une ressource précieuse pour la recherche et la présentation du bien, mais qu'elle nécessite un lieu d'hébergement meilleur, notamment au niveau de la sécurité et du suivi environnemental.

Implication des communautés locales

La communauté locale du bien proposé pour inscription et la ville participent en tant que bénévoles, guidant les touristes et contribuant à la recherche. Les résidents sont aussi partie prenante à travers les entreprises industrielles et les institutions sociales présentes sur le bien. L'ICOMOS considère que les bénévoles, les entreprises industrielles locales et les institutions sociales devraient être représentés dans le comité de gestion Anglo. En réponse à la troisième lettre de l'ICOMOS, l'État partie a exposé le processus correspondant.

L'ICOMOS considère que la gestion de ce vaste bien est difficile pour le personnel disponible et note qu'il n'y a semble-t-il aucun responsable global du site. En réponse à la troisième lettre de l'ICOMOS, l'État partie a indiqué que le président du comité de gestion Anglo, un architecte, est le responsable du site.

L'ICOMOS considère qu'une attention toute particulière s'impose pour la finalisation des inventaires, un plan exhaustif de gestion de la conservation, des recherches archéologiques, des directives et une étude d'impact des interventions proposées ; une préparation aux risques ; un meilleur hébergement des archives et la représentation de la communauté locale dans le comité de gestion. En conclusion, l'ICOMOS recommande que le plan de gestion du bien soit élargi à ces points et inclue également un plan de recherche pour l'archéologie industrielle et sous-marine. En réponse à la troisième lettre de l'ICOMOS, l'État partie a accepté ces mesures et communiqué un calendrier de mise en œuvre.

6 Suivi

Des indicateurs de suivi ont été proposés ; ils couvrent la protection, la conservation, la gestion et la protection de l'environnement. Le dossier de proposition d'inscription comporte un tableau exposant les indicateurs, le calendrier de suivi et l'autorité/agence responsable. L'ICOMOS considère que ceux-ci doivent être issus d'une base de données complète du bien, recouvrant tous les bâtiments, les sites inoccupés, le mobilier et les machines. En réponse à la troisième lettre de l'ICOMOS, l'État partie a indiqué que la base de données serait terminée d'ici à octobre 2015.

L'ICOMOS considère que le système de suivi devrait être associé à une base de données exhaustive du bien.

7 Conclusions

L'ICOMOS considère que le bien proposé pour inscription remplit les critères (ii) et (iv) ainsi que les conditions d'intégrité et d'authenticité. Toutefois, plusieurs bâtiments ayant été mis à la disposition d'entreprises industrielles et de sociétés pour être réutilisés, et les logements ouvriers ayant subi des transformations, des directives visant une intervention minimale et la compatibilité avec les structures Liebig-Anglo sont requises pour préserver l'intégrité et l'authenticité. En réponse à la troisième lettre de l'ICOMOS, l'État partie a indiqué que de telles directives étaient en cours de préparation et seraient achevées avant le dernier trimestre 2016.

L'ICOMOS considère que la principale menace pesant sur le bien est le risque d'incendie. Les délimitations du bien proposé pour inscription et de sa zone tampon sont appropriées. La protection juridique en place est appropriée pour le bien et la zone tampon mais gagnerait à ce que la protection législative de l'ensemble de la zone tampon soit haussée au niveau le plus élevé. Des inventaires exhaustifs doivent être finalisés afin de constituer une base de suivi, de conservation et d'entretien, et un plan de gestion de la conservation est requis. L'ICOMOS note qu'il est envisagé d'installer

l'Université technologique sur le site de l'ancien bâtiment de l'administration, détruit par un incendie, et estime qu'une étude archéologique du site ainsi qu'une étude d'impact sont nécessaires (conformément à l'article 110 des *Orientations devant guider la mise en œuvre de la Convention du patrimoine mondial*). L'État partie a indiqué que cette exigence serait intégrée au plan de gestion d'ici au premier trimestre 2016. La section des archives du musée est une ressource précieuse pour la recherche et la présentation du bien, mais nécessite un lieu d'hébergement meilleur, notamment du point de vue de la sécurité et du suivi environnemental.

La communauté locale du bien proposé pour inscription et la ville participent en tant que bénévoles, guidant les touristes et contribuant à la recherche. Les résidents sont aussi partie prenante à travers les entreprises industrielles et les institutions sociales présentes sur le bien. L'État partie a indiqué que les bénévoles, les entreprises industrielles locales et les institutions sociales seraient représentés dans le comité de gestion Anglo.

L'ICOMOS considère que la gestion de ce vaste bien est difficile pour le personnel disponible et note que le président du comité de gestion Anglo est le responsable global du site. Une attention toute particulière est nécessaire pour la finalisation des inventaires, un plan de gestion de la conservation, les recherches archéologiques, les directives et l'étude d'impact des interventions envisagées ; la préparation aux risques ; l'amélioration de l'hébergement des archives et la représentation de la communauté locale au comité de gestion. Le plan de gestion du bien a besoin d'être élargi pour traiter toutes ces questions et pour inclure un plan de recherche pour l'archéologie industrielle et sous-marine. L'État partie a accepté d'entreprendre ces mesures et un calendrier a été communiqué.

L'ICOMOS a considéré que le nom du bien devrait être modifié pour devenir « site industriel de Fray Bentos ». Toutefois, en réponse à la troisième lettre de l'ICOMOS, l'État partie a exprimé le désir de nommer le bien « paysage industriel de Fray Bentos », ce que l'ICOMOS a accepté.

8 Recommandations

Recommandations concernant l'inscription

L'ICOMOS recommande que le paysage industriel de Fray Bentos, Uruguay soit inscrit sur la Liste du patrimoine mondial sur la base des **critères (ii) et (iv)**.

Déclaration de valeur universelle exceptionnelle recommandée

Brève synthèse

Situé sur une avancée de terre sur le fleuve Uruguay, à l'ouest de la ville de Fray Bentos, le complexe industriel se signale par l'énorme entrepôt frigorifique et la haute cheminée en briques de la chaufferie, qui se détachent

d'une variété de toits en dents de scie. Illustrant toute la chaîne de la viande – approvisionnement, transformation, emballage et expédition –, le site comprend des bâtiments et des équipements de La Liebig Extract of Meat Company, qui exporta du concentré de viande et du *corned-beef* sur le marché européen à partir de 1865, et de la Anglo Meat Packing Plant, qui exporta de la viande surgelée à partir de 1924. Ici, la recherche et la technologie allemandes se sont associées à l'initiative anglaise afin de fournir en nourriture le marché mondial, y compris les armées ayant pris part aux deux guerres mondiales qu'a connues le XXe siècle. Les logements du personnel et les institutions sociales qui accueillaient et aidaient la communauté cosmopolite des ouvriers sont toujours utilisés aujourd'hui.

Critère (ii) : Le paysage industriel de Fray Bentos témoigne de l'échange de valeurs humaines entre la société européenne et la population sud-américaine au XIXe et au XXe siècle, à l'origine de changements sociaux, culturels et économiques sur les deux continents à cette époque. Ceci est dû à l'échange autour des progrès technologiques, qui favorisèrent la production et l'exportation à l'échelle mondiale de viande en conserve et surgelée, et à la population de travailleurs immigrés en provenance de plus de 55 pays différents.

Critère (iv) : L'ensemble des pâturages et des zones réservées au bétail, les bâtiments industriels, les infrastructures mécaniques, les installations portuaires, le tissu résidentiel et les espaces verts reliant le fleuve et les zones agricoles à la ville du paysage industriel de Fray Bentos illustrent un exemple éminent de développement industriel du début du XXe siècle.

Intégrité

Le bien réunit tous les éléments relatifs à l'histoire du site et à sa période de fonctionnement ; il est d'une taille appropriée pour garantir la représentation complète des caractéristiques et des processus significatifs de son importance. Le cadre paysager est de dimensions appropriées et les vues depuis le fleuve et la ville ont été préservées. Certains bâtiments nécessitent des interventions de réparation et de conservation, mais globalement le site ne souffre pas de négligence.

Authenticité

Le bien est authentique en termes de situation et de cadre, de matériaux et de substance et d'usage/fonction en ce qui concerne les bâtiments faisant partie du musée de la Révolution industrielle. Les archives renferment des documents historiques dans lesquels des informations techniques étayaient les travaux de réparation et de restauration. D'autres bâtiments ont été adaptés à de nouveaux usages et les logements ouvriers ont été améliorés pour offrir un confort plus moderne aux familles qui y vivent aujourd'hui, dont beaucoup entretiennent un lien avec le bien à travers leurs membres qui y ont travaillé. L'authenticité du bien est vulnérable aux projets

de nouveaux développements prévus sur celui-ci, notamment de nouveaux usages pour les bâtiments et sites ainsi que de nouvelles constructions.

Mesures de gestion et de protection

Le bien est protégé en tant que site historique national en vertu de la loi sur le patrimoine n° 14.040 d'août 1971, telle que modifiée en 2008, et du décret réglementaire 536/72. Les biens appartenant aux agences gouvernementales et à des entreprises privées sont protégés au titre de la loi n° 17.473 du 9 mai 2002. Ces lois sont administrées par la Commission du patrimoine culturel national.

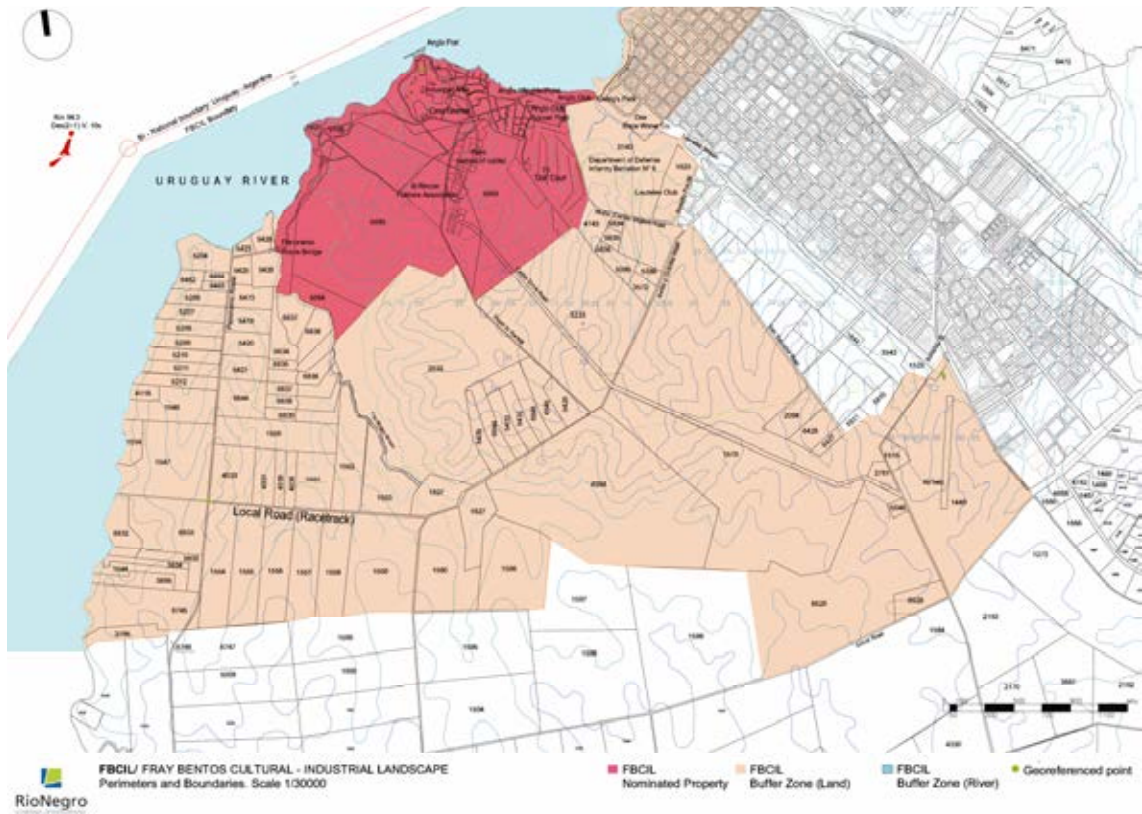
Le bien est administré à l'échelon du site par le comité de gestion Anglo depuis 2008, avec la contribution des représentants du ministère de la Culture et de l'Éducation, du ministère du Logement, de l'Urbanisme et de l'Environnement ainsi que de la municipalité de Río Negro. Cette instance est responsable de la mise en œuvre du plan de gestion du bien 2012-2015, lequel a été approuvé par la Commission du Patrimoine culturel national en janvier 2014.

Recommandations complémentaires

L'ICOMOS recommande que l'État partie prenne en considération les points suivants :

- hausser la protection juridique de la zone tampon au niveau le plus élevé ;
- prendre des dispositions pour la représentation des bénévoles, des entreprises industrielles locales et des institutions sociales dans le comité de gestion Anglo ;
- compléter le plan de gestion afin d'y inclure :
 - l'inventaire des machines ;
 - l'inventaire/la base de données comme base de suivi, de conservation et d'entretien ;
 - un plan de recherche pour l'archéologie industrielle et sous-marine, dont les résultats seraient à l'avenir intégrés dans la gestion, l'éducation et l'interprétation ;
 - un plan de conservation exhaustif associé à l'inventaire/la base de données et traitant des besoins en réparation et en entretien ;
 - la réalisation d'études d'impact de toutes les nouvelles propositions de planification de gestion, y compris les nouveaux usages de bâtiments existants et les nouveaux bâtiments sur le site, conformément au paragraphe 110 des *Orientations devant guider la mise en œuvre de la Convention du patrimoine mondial* ;

- des directives quant aux interventions sur les bâtiments industriels et résidentiels ;
 - l'extension du système de suivi afin de le relier à l'inventaire/la base de données du bien.
- soumettre au Centre du patrimoine mondial avant le 1^{er} décembre 2016 un rapport sur la mise en œuvre des recommandations ci-dessus, pour examen par le Comité du patrimoine mondial lors de sa 41^e session en 2017.



Plan indiquant les délimitations du bien proposé pour inscription



Le complexe industriel Liebig-Anglo vers 1930



Vue aérienne du complexe industriel



Vue de la zone de transformation de la viande



École dans le quartier de l'époque Anglo