Towns and regions
of artistic and historic interest
Lens-Liévin

Listen to the story of the 11/19

Loos-en-Gohelle

Editorial by the President of the Lens-Liévin Conurbation

A symbolic location marking the registration of the mining basin on the UNESCO list of World Heritage Sites, base 11/19 has become a site committed to sustainable development, innovation and artistic expression.

Just like other vestiges of that era, the former pithead has also been converted into a major tourist asset for our region. Objects of universal interest, mines fascinate and excite millions of people around the world. Industrial tourism is booming and every opportunity should be taken to capitalise on this boom…

As a consequence, the creation of tourist products and brochures in different languages as well as the design of proper signage, are absolutely essential if we are to sustain this form of economy, which has a promising future in our conurbation. Coupled with development generated by the Louvre-Lens museum and by the memorials of the Great War, the discovery of a mining heritage has been instrumental in showcasing our region.

Jean-Pierre Kucheida
President of the Lens-Liévin Conurbation
Honorary Member of Parliament

Located in the town of Loos-en-Gohelle, a few hundred meters away from the Louvre-Lens museum, this coal-mining site created by the *Société des Mines de Lens* operated from 1894 to 1986 and has kept the greater part of its facilities. Together with the Arenberg pit at Wallers, the Delloye pit at Lewarde and 9/9b at Oignies, it is one of the four largest emblematic pits in the region's mining history. The spoil heaps and mining village also reflect the mining system's profound influence on the landscape. Base 11/19 is now undergoing reconversion based on the themes of mining history, culture, economy and the environment, as part of plans to set up a sustainable development hub. Base 11/19 is located in the heart of the Lens-Liévin region, a cradle of art and history, as well as being situated within the boundaries of the Nord-Pas de Calais mining basin, recently included in the list of UNESCO World Heritage Sites.

1852 — Creation of the *Société des Mines de Lens*.

1891–1894 — Construction of pit 11, also known as Saint-Pierre in honour of Pierre Destombes, a company director.

1914–1918 — Destruction of the facilities during the First World War.

1920–1925 — Reconstruction of pit 11.

1946 — Nationalisation of the coalmines and creation of *Charbonnages de France*.

1960 — Start of operations at the 11/19 mining hub.

1986 — Shutdown of pit 11/19.

1990 — Acquisition of the pithead by Loos-en-Gohelle.

1992 — Tower and frame included in the list of protected historical structures.

1995–1998 — Foundation of the *Chaîne des Terrils* and *Culture Commune* associations.

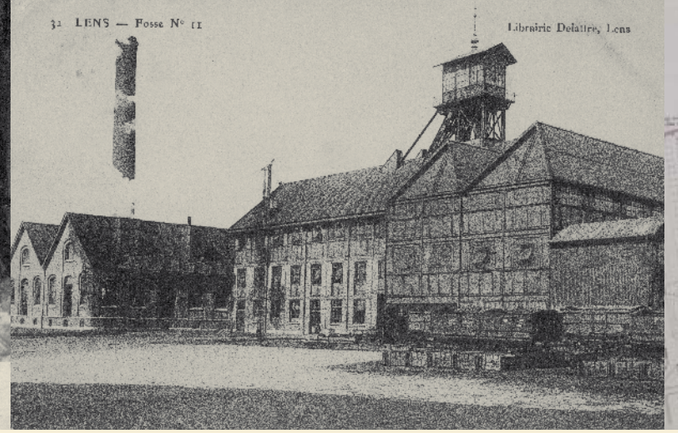
2000 — The Lens-Liévin conurbation, which owns the site, initiated the reconversion project.

2009 — Registration as a protected structure.

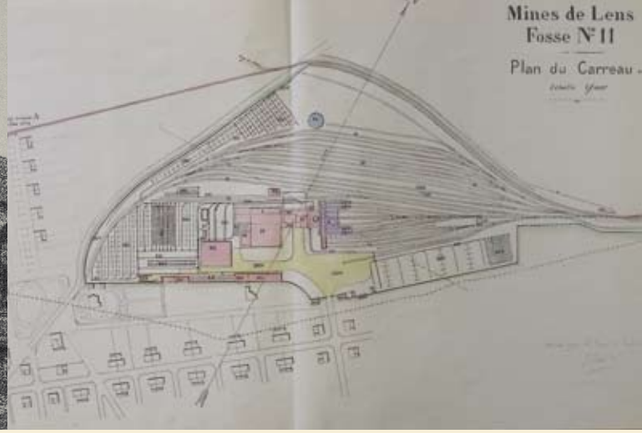
2012 — Base 11/19 was included in the perimeter of the Nord-Pas de Calais mining basin, referenced on the UNESCO World Heritage List.

In 1898, pit 11 was chosen for the visit of President Félix Faure, posing at the centre of the photo.

In 1901, the Board of Directors of the *Société des Mines de Lens* featured illustrious names from among the industrialists of the Lille-Roubaix-Tourcoing area.



Pit 11 prior to 1914. From left to right: the engine house and the hoisting engine's smoke exhaust stack, the head frame with the shaft station and sorting facilities.



Map of pithead facilities in 1914.

Beginnings

In the mid-19th century, the coal-mining industry took the Pas-de-Calais region by storm. Rich industrialists in the region invested their capital in exploration companies, which, once the deposit was located, set up mining companies that were granted permission to mine for coal on portions of land known as concessions.

The *Compagnie des Mines de Béthune* (founded in 1851), the *Société des Mines de Lens* (founded in 1852) and the *Société du Midi de Lens* (founded in 1858, later becoming the *Société Houillère de Liévin* in 1862) jointly explored the coal reserves of this promising area, where competition was tough.

Until coal was discovered underground, the region's towns, with the exception of Lens which already had a population of 3 000 in 1851, were farming villages. Within the space of a few years, this discovery radically transformed life and the local landscape. Several extraction sites or "pitheads*" were erected. Coal mining then became a business requiring substantial manpower. Mining villages were therefore built close to these pitheads in order to accommodate miners and their families, who had come in droves to settle in the region.

These urban entities were set up without any real links to pre-existing villages.

In the pit's mining village, the Rue Saint-Pierre is a reminder of the tribute paid to the directors of the very catholic *Société des Mines de Lens*.

Pit 11, otherwise known as Saint-Pierre

The *Société des Mines de Lens* numbered its pits as they were dug, hence the use of numbers 11 and 19 to designate this site. In addition to this tradition, it was also customary to give each pit the name of a company director, in this particular case Pierre Destombes, a trader from Tourcoing.

Pit 11 started being sunk* in 1891. It was commissioned in 1894 and mined by almost 1500 miners. In 1903, of the 12 mining sites run by the company at the time, pit 11 achieved the largest annual output with 383 450 tons of coal.

The architecture of the pithead buildings is similar to that of other sites opened by the company between the end of the 19th century and the period leading up to the Great War. In addition to the use of brick, it is characterised by the use of structural steel.

In 1907, the complex was expanded with the opening of pit 11b, a few hundred meters away in the town of Liévin, also known as the Saint-Albert pit in honour of Albert Crespel, another of the company's directors.

Instead of being used to mine coal, this pit was used to ventilate* pit 11.

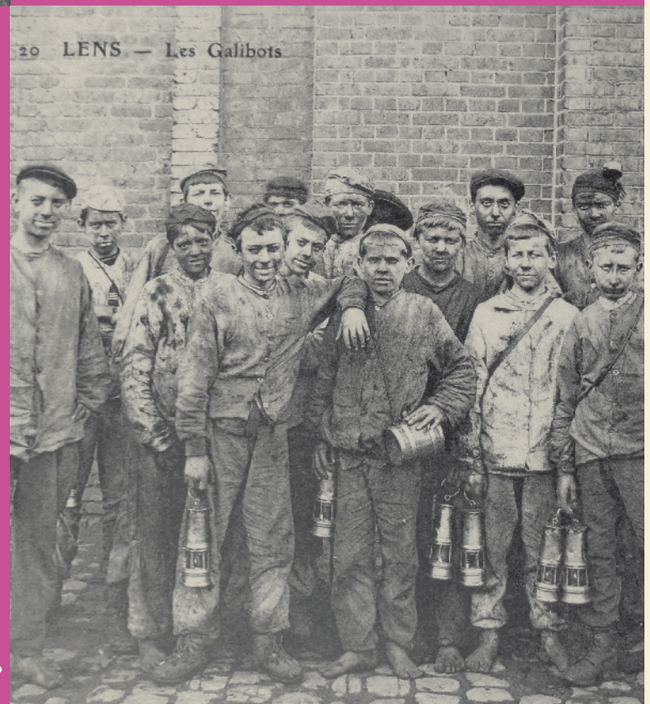
11 b. pithead facilities before the First World War.

Women in the sorting facility of pit 11.

… and children's work

When pit 11 was built, the *Société des Mines de Lens* had almost 900 children on its payroll, referred to as "galibots". Above ground, they were often put to work sorting coal. If they were big enough, they went underground. Here they removed coal from the pit, pushed coal trucks, or brought pit props and other equipment to the miners.

They learned their trade on the job. At the beginning of the 19th century, 8-year-old children worked deep down in the mines. It was only gradually that laws were enacted forbidding children of less than 10 and then 12 from working underground and at night. It was not until 1967 that children under 16 were forbidden from working in the mines.



"Galibots" hired by the *Société des Mines de Lens*.

Women's work…

Once hired to push mine carts* through the tunnels, women were gradually forbidden from working underground* as of the 1860s. Confined to jobs above ground*, they essentially worked in unloading* and sorting* facilities as well as in the lamp room*, while others cleaned the bathhouses or worked in the warehouse. In the sorting facility, they handled several tons of coal a day, exposed to noise and dust as well as hot and cold, under the watchful eye of the foremen.

Hired at the tender age of 12 and known by the name of "cafus", they performed particularly arduous tasks and were not spared by silicosis*. Their only "coquetry" was the cap they used to protect their hair from dust, the fabric and bindings of which varied from one company to the next. They generally left the mine after getting married... to a miner. Then they started a new life, which was very often devoted to religiously taking care of the home, always haunted by the fear of a husband, brother or child being killed in an accident.

The ruins of pit 11 in 1918.

Map showing changes in the front line on the land owned by the *Société des Mines de Lens*, from 1914 to 1917.

In the midst of turmoil

During the First World War, the pit found itself in a war zone. The Germans took possession of the area in October 1914. They immediately rendered the facilities of the *Société des Mines* inoperative by blowing up essential machinery and by severing mining cables, thus causing mine cages* to plunge to the bottom of the shaft. Pit 11 then found itself exposed to artillery bombs.

However, most of the damage occurred after the Loos battle and when pit 15 was taken over by the English in September. In order to guard against potential underground attacks through the tunnels, the Germans then implemented a systematic plan to destroy the production system. They blew up shaft linings* in order to flood the tunnels. The liberation of Hill 70, led by the Canadians in August 1917, marked the end of the conflict in the immediate surroundings of pit 11.

Alexandre Villedieu

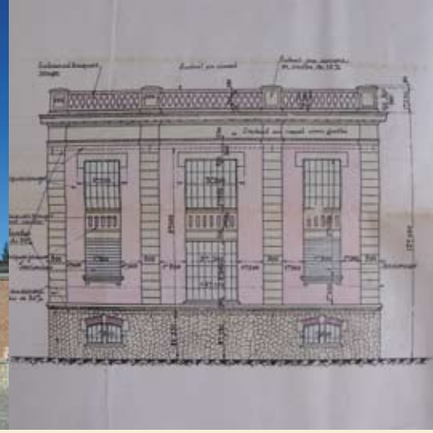
A century later, numerous archaeological remains were still being unearthed in the area.
In 1996, the remains of Alexandre Villedieu, a Lyon-born soldier who died on October 9th 1915, were found at the foot of the spoil heaps. His exhumed personal effects (his cap, his identity disc, his wallet and a fountain pen still in working order) are now exhibited at a museum in Loos-en-Gohelle.

Photograph taken during the start of refurbishment work on pit 11.

New pit 11 facilities in 1925.

The post-war hoisting engine with its bicylindroconical drums has been partially preserved.

The regional influence is reflected in the Flemish-like design of the bathhouse's crow-stepped gables.



With its moulded balusters and string courses reminiscent of freestone bosses, the sub-station façade boasts a classical décor.

Reconstruction

In the immediate aftermath of the war, the *Société des Mines de Lens* could do nothing but gauge the magnitude of the disaster. Its entire production facility was destroyed: shaft linings blown up, shafts and tunnels immersed in millions of cubic meters of water, head frames collapsed, buildings and mining machinery ruined, railway system destroyed, worker dwellings and village amenities wiped out … The next task was to promptly restore the destroyed mines in order to get production back on track.

Given the extent of the damage, the reconstruction project was a real challenge. Technical challenges were compounded by economic hardships and a shortage of materials…

A huge modernisation effort

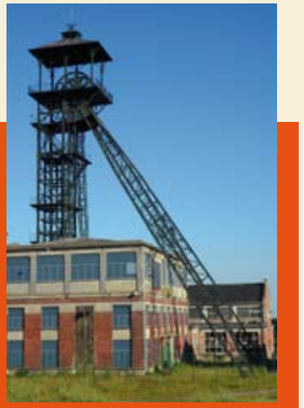
The result of gradual adjustments implemented with each technical development, the pre-war production facility was not a very organised unit compared with more modern designs. In spite of difficulties, the *Société des Mines de Lens* turned the utter devastation of its facility into an upgrade opportunity.

On the basis of studies and tests that were conducted to restore the pits as part of an effort undertaken by the *Commission technique du Groupement des houillères victimes de l'invasion** (a technical committee representing the group of coal mines destroyed by the invasion), pits were fitted with the most advanced machines and systems. With the advent of electricity, it was now possible to install bicylindroconical drums as a replacement for those that ran on coal. For purposes of speed and economy, standard models were used to construct the various pithead buildings. This standardisation effort extended to the layout, materials and decoration of mine buildings.

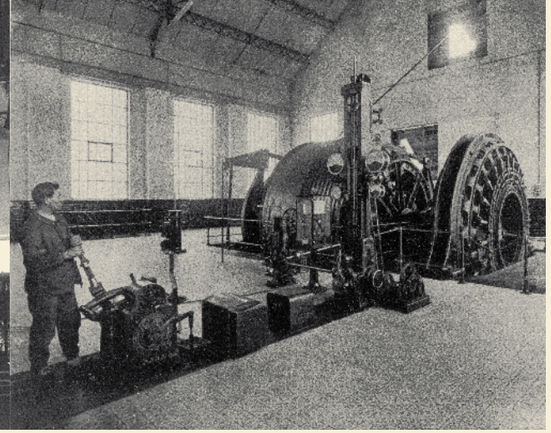
While the general layout of facilities varied somewhat depending on each site's specific features, the structure and architecture of the bathhouses, engine houses and workshops were identical on all company pits. Completed in 1925, pit 11 is a perfect illustration of this modern style. It was regularly highlighted by the *Société des Mines de Lens* in publicity campaigns about the restoration of its facilities.
A great deal of care was taken regarding the use of materials. Brick and reinforced concrete, both modern and inexpensive, replaced pre-war metal structures. In addition to a quest for greater efficiency, aesthetics was also a major concern. The alternation of materials (millstone, brick, concrete), combined with classical or regional decorative features, reflect the company's concern for prestige.

Pit 11 head frame

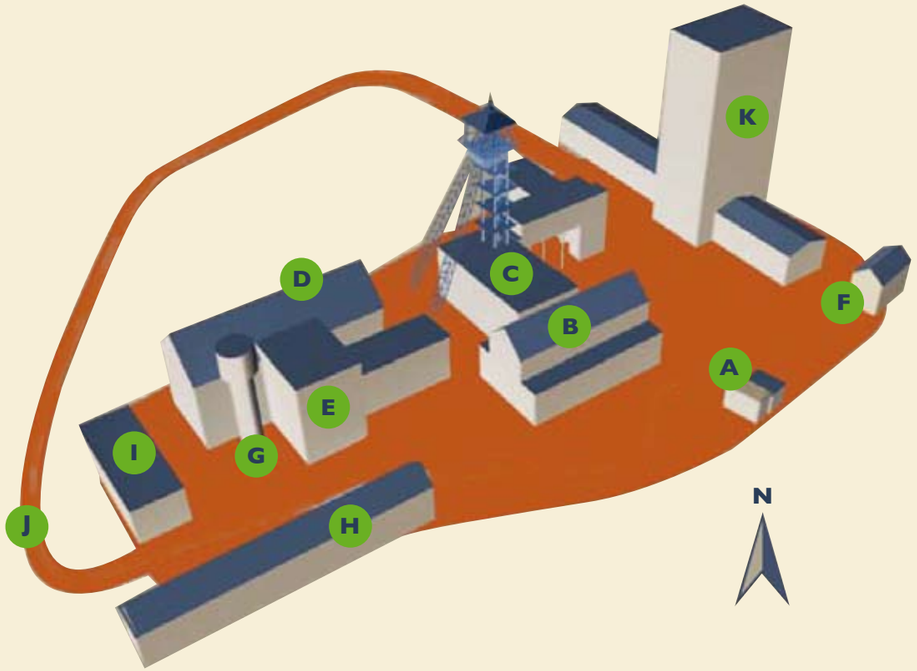
This imposing metal structure stands 45 metres high and weighs almost 350 tons. Situated at the base of the pit, it supports the wheels over which the mining cables run. Driven by machinery, these cables operate the cage that transports miners and coal up and down the shaft. The wheels measure 5.50 m in diameter and are surrounded by a platform with a guardrail, topped by a tower. The structure is crowned by the mine's insignia comprising an intertwined pick and axe. Given the dire shortage of metals, the head frame was designed with riveted trellis beams forming a sturdy structure with very little steel. The standardisation policy implemented in the 1920s explains why an identical head frame can be found at the Saint-Amé site in Liévin, the location of former pit 3 belonging to the *Société des Mines de Lens*.



The 11/19 bathhouse in 1975.



The hoisting engine.



Inside view of the forge on a pit belonging to the *Société des Mines de Lens*.

The pithead

A The pit entrance and caretaker's lodgings

B The bathhouse

This great building served as a changing room and shower room. Miners hung their clothes up here, finding them clean and dry when they came up from the mine. This practice gave rise to the name "salle des pendus" (hanging room), commonly referred to by miners as "le lavabo" (bathroom sink). At the end of their working day, the "gueules noires" (black faces) could shower in communal facilities while individual bathrooms with bathtubs were reserved for engineers.

C The shaft station and head frame

This is where miners retrieved their lamps, received their work instructions and took the cage down to the bottom of the shaft. Coal-filled trucks were also returned to this location, where they were emptied by women working in the sorting facility. The building is crowned by the head frame of pit 11.

D The engine house.

Standing opposite the head frame, this building houses the hoisting engine and air compressors. Like other pithead* buildings, this edifice combines reinforced-concrete structures with brick masonry. The hoisting engine enabled cages to move up and down inside the shaft by means of cables attached to the head frame. The air compressors occupied the west part of the building. They provided compressed air for operating fans and pneumatic drills underground.

E The sub-station

is located to the south. Four transformers received 15 000 volts of current from the switching station **F** in order to supply the large motors, the hoisting engine, the air compressors and the site's lighting system.

G The water tower

Located right next to the engine house, this concrete tank supplied the water required to cool the air compressors. It also supplied the bathhouse, the entire water distribution system and the fire-fighting water system for the pithead and the mining village.

Surface facilities included other buildings and spaces required to operate the pit.

Storage, maintenance and distribution of equipment occupied the day staff: blacksmiths, carpenters, storekeepers and horse drivers.

H The workshops

This long brick masonry building included the wage office and the store where tools and spare parts were kept, as well as a forge and a workshop for maintaining and repairing equipment.

I The stables

Horses were used for transporting equipment above ground and for hauling trucks underground. With the opening of pit 19 in 1960, a new workshop was built on this spot.

J Wood and equipment storage yards

In the past, the spaces that are now parking lots were used for storing equipment (rails, trucks, metal props, etc.) and wood used to prop up the tunnels. These huge spaces occupied almost half of the pithead surface area. Their initial function is now illustrated by blocks of wood.

K Concentration tower of pit 19

See p. 15.

Ernest Cuvelette (1869-1936) the man behind the reconstruction of the *Mines de Lens*

Pit 11 is seen on this medal commemorating the reconstruction of the *Mines de Lens*, which returned to its pre-war output levels in 1929.

A son of farmers living in the Aisne, Ernest Cuvelette was a brilliant student who studied at the Ecole polytechnique and the Ecole des mines. In 1906 he was employed by the *Mines de Lens*, where he worked on the design of pit facilities and developed an innovative fuel efficiency programme. During the war, he managed the department of metal products for the munitions ministry. His name is mainly associated with the reconstruction of destroyed coalmines in the Nord and Pas-de-Calais areas. In May 1917, he started planning for the reconstruction effort and founded the "Commission technique du Groupement des houillères victimes de l'invasion" (technical committee representing the group of coal mines destroyed by the invasion) in order to rapidly and efficiently restore the pits once the war was over. Thanks to this organisation he obtained state guarantees to collect the amounts required for the initial work and took in equipment orders from affected companies. While still continuing to manage these collective organisations, Cuvelette concentrated his efforts on the reconstruction of the *Mines de Lens*, which were among the worst affected and of which he became managing director. An enormous task awaited him on this concession, which had seen the destruction of almost all its aboveground and underground facilities. In an area made particularly dangerous by unexploded ammunition, millions of cubic metres of rubble had to be cleared, blown-up shaft linings had to be refitted and 40 million cubic metres of water had to be pumped out of shafts and tunnels. For 10 years, Cuvelette performed this task with formidable efficiency, overseeing the restoration of hundreds of miles of tunnels, the reconstruction of the Company's railway system, of electric plants, of washhouses, of coke furnaces, of briquetting plants and of by-product processing facilities. He also arranged for the clearing of 8 000 worker dwellings destroyed during the war and for the construction of 12 000 new dwellings so that the Lens miners, now scattered throughout France, could resume their work and boost production. Thanks to his efforts, pitheads were not only rebuilt but were also modernised. Once operations had resumed, he focused his attention on fuel efficiency. This great engineer was awarded the *Légion d'honneur* and the *Médaille d'honneur du travail*. Exhausted, he retired from his position as managing director of the Mines de Lens in October 1935.

OBERFELDKOMMANDANTUR 670
DER OBERFELDKOMMANDANT

BEKANNTMACHUNG

Durch Urteil des Kriegsgerichts der Oberfeldkommandantur (V) 670 sind heute die franzosischen Bergarbeiter

1. Louis Fleurey aus Montigny-en-Gohelle
2. Auguste Boulet, do.
3. Lucien Deuchin, do.
4. Lucien Deuchin, d'Hénin-Liétard
5. Robert Lebel, do. Noyelles-Godault
6. Roland Ernest, do. Courrières
7. Alfred Boulin, do.
8. Robert Delbecke, d'Hénin-Liétard
9. Julien Charles, do.
10. Francois Bernard, do.
11. Louis Bridoux, do.

zu je 5 Jahren Zuchthaus verurteilt worden, weil sie dem Bergarbeiterstreik beigetreten sind und sich als Agitatoren dabei betätigt haben. Verbrechen gegen die Verordnung des Oberbefehlshabers des Heeres über die Einführung deutschen Strafrechts und strafrechtlicher Bestimmungen in dem besetzten französischen Gebiet vom 12. Juni 1940 in Verbindung mit § 4 Kriegsunterstrafrechtsverordnung.

Von demselben Gericht sind ferner heute verurteilt worden:

1. Yvon Nicholas Bonnevault, Oberpoion, zu 2 Jahren Zuchthaus.
2. Yvon Florent Gaetan, Hauptmann, zu je 1/2 Jahren Zuchthaus,

da sie sich beim Bergarbeiterstreik als Agitatoren betätigt haben.

Lille, den 3. Juni 1941.

Der Militärbefehlshaber im Nordfrankreich
Der: NIEHOFF, Generalleutnant.

OBERFELDKOMMANDANTUR 670
DER OBERFELDKOMMANDANT

AVIS

Suivant jugement rendu ce jour par le Tribunal de guerre de l'Oberfeldkommandantur (V) 670, les mineurs français, dont les noms suivent, ont été condamnés chacun à 5 ans de travaux forcés pour avoir participé à la grève des mineurs, et n'y être susceptible en aucunement.

Ceci en violation de l'ordonnance du Commandant en Chef de l'Armée concernant l'introduction du droit pénal allemand et des prescriptions pénales dans les territoires occupés de la France, en date du 13 juin 1940, en corrélation avec le § 4 du droit pénal spécial pour le temps de guerre (Kriegsunterstrafrechtsverordnung).

1. Louis Fleurey, de Montigny-en-Gohelle
2. Auguste Boulet, do.
3. Lucien Deuchin, do.
4. Lucien Deuchin, d'Hénin-Liétard
5. Robert Lebel, do. Noyelles-Godault
6. Roland Ernest, do. Courrières
7. Alfred Boulin, do.
8. Robert Delbecke, d'Hénin-Liétard
9. Julien Charles, do.
10. Francois Bernard, do.
11. Louis Bridoux, do.

Ont été, en outre, condamnés par le même Tribunal pour s'être compromis en mineurs, lors de ladite grève:

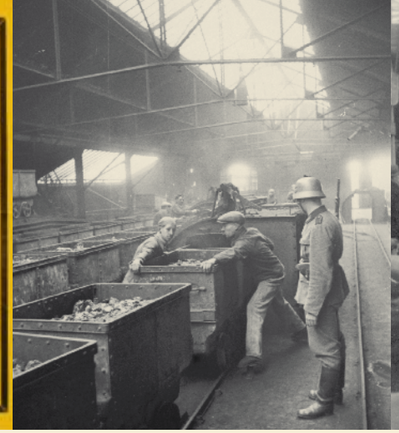
1° Yvon Nicholas Bonnevault, d'Ouessant à 2 ans de travaux forcés;

2° Yvon Florent Gaetan, d'Ouessant, à 3 ans et demi de travaux forcés.

Lille, le 3 juin 1941.

L'Oberfeldkommandantur et Président du Tribunal
signé: NIEHOFF, Generalleutnant.

Poster from June 1941 signed by General Niehoff, announcing the sentencing of striking miners.



After the strike of May/June 1941, work was carried out under the supervision of German troops now occupying the pits.

The meetings of Maurice Thorez, here at Valenciennes in December 1945, were an opportunity to urge miners to step up their contribution to the country's recovery.

1940 to 1960

German occupation

In Lens, mining personnel were evacuated over the period spanning the 17th to the 20th of May 1940. Mining and industrial resources had turned this region into a major asset for the German war effort. From June onwards, the Nord and Pas-de-Calais administrative divisions were located in the no-go area under the Brussels-based Germany military command. Relieved by the Lille-based Oberfeldkommandantur 670, it quickly restarted the production system. Reopened on the 15th of June 1940, the mines resumed normal operations in September. The military presence was accompanied by a methodical economic regime. Mining companies became useful auxiliaries helping the occupier to push production to its limits. In 1936, social benefits quickly fell by the wayside: salaries were frozen, the working day was extended and workers were deprived of breaks, while job wages and time keeping were re-introduced. Food rationing made the miners' living and working conditions even more difficult.

Miners on strike

These difficult conditions prompted the first series of industrial action and resistance. In May/June 1941, 100 000 miners downed tools in the mining basin. Encouraged and controlled by communist militants, this major strike was a combination of worker demands and patriotic disobedience. It was harshly repressed by the Germans whose troops were now occupying the pits and making repeated arrests. In July 1941, 270 miners were deported to Germany, where 130 would die. The period of occupation continued, punctuated by acts of resistance and repression up until the general strike of August 1944, which accompanied the liberation of the mining basin.

1944-1947 : the coal battle

On the 28th of August 1944, the exhausted miners were urged to resume work by Henri Martel, a communist member of parliament representing the Nord administrative division, who appealed to them from his base in London. Coal production was vital.

Poster published during the coal battle.

Enacted in 1946, miner status was intended to make mining an appealing profession by compensating miners for risks and difficulties in the form of clearly identified benefits.

Rationalisation plan designed to amalgamate the production of several pits at the 11/19 mining hub in the 1960s.

In a speech delivered at Waziers near Douai on the 21st of July 1945, PCF leader Maurice Thorez called on miners to redouble their efforts to help with the country's recovery. In 1946, the production target was set at 100 000 tons of coal per day. During this time, the workforce of the Nord-Pas de Calais mining basin reached maximum levels with more than 220 000 miners.

Nationalisation

General de Gaulle and the communist ministers of the provisional government promptly set about nationalising the coalmines. In October 1944, company chief executives and directors were suspended and replaced by provisional directors.

Following the decrees of December 1944 and October 1945, a law was enacted on the 17th of March 1946, confirming nationalisation of all French coalmines, brought together in groups and basins under the supervision of the central public establishment of French collieries. The facilities run by the former *Société des Mines de Lens* now belonged to the Lens group, which merged with the Liévin group in 1952.

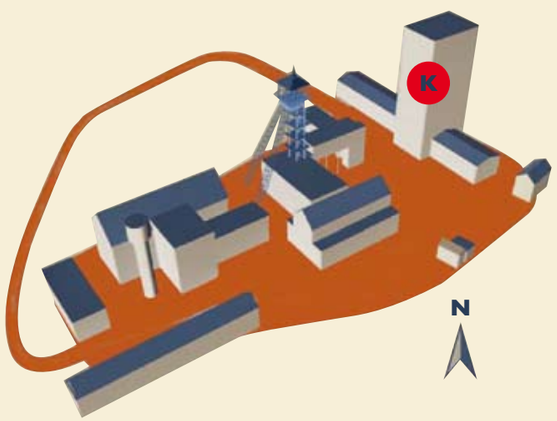
Miner status and major strikes

In 1946, miners obtained a specific status regulating the profession and conferring various benefits (free housing, etc.). However, these improvements were rapidly challenged by the decrees of the Minister for Industry, Robert Lacoste. Miners did not feel they were being rewarded for their sacrifices. Major strikes broke out in 1947–1948, which were harshly repressed by the army.

Modernisation and rationalisation

Thanks to loans granted by the Marshall plan and on the basis of a restructured operating scheme (8 groups replacing around 20 concessions), the *Charbonnages de France* drew up an extensive work schedule to rationalise and modernise the coalmines. The principle was to amalgamate the operation of several sites on pits equipped with the most powerful machinery and the most efficient mining techniques in order to increase profitability. Of the 109 mines operating in the Nord-Pas de Calais basin in 1945, only 60 were left in 1959. The creation of pit 19 at Loos-en-Gohelle was part of this movement. The shaft was sunk in 1954 and the mining hub started operations in 1960. Its construction required considerable capital expenditure. As fate would have it, it was the very same year that prefigured the end of operations via the plan drawn up by the Minister for Industry Jean-Marcel Jeanneney, which officialised the start of the coalmining recession.

The mining hub of pit 19



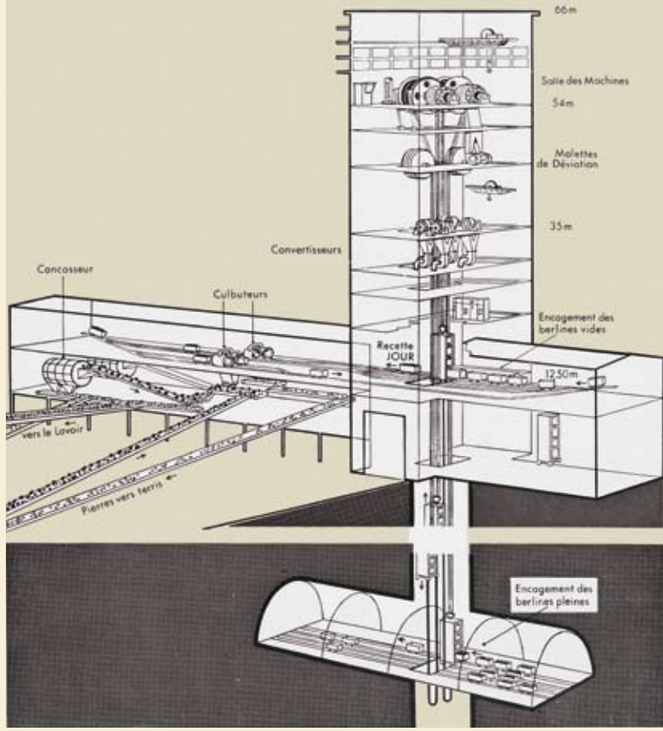


Diagram illustrating the working principle of the concentration tower

To the north of the Lens-Liévin group, the 18/18 b mining hub located at Hulluch would amalgamate the production of low-volatile coal*. For the production of high-volatile coal* in the south, it was decided to locate the hub on the site of pit 11, which had a number of advantages. It occupied a central position within the group's facilities, possessed the appropriate infrastructures and had sufficient land reserves for the formation of large spoil heaps generated by the massive mining operations to be developed there. Shaft 19 started being sunk in 1954 in order to rationalise the mining of surrounding pits.

The 19 K concentration tower

Above a dual-compartment shaft measuring 6.65 m in diameter, a 66-metre high reinforced-concrete tower was built over the period spanning 1958 to 1960, weighing 10 000 tons. This colossal structure represents the rationalisation phase and epitomises the technical peak of the mining industry. It is the last visible example of the 4 towers of this type to be built in Nord-Pas de Calais mining basin.

Commissioned in 1960, the tower was designed to mine approximately 6000 net tons per day. The mining system was distributed over 9 levels, the stacking of which resulted in a significant saving of space. Positioned at the top of the tower, the engine, with its two 4400 horse-power motors, could pull four 4-storey cages up from the bottom of the pit, each containing a 3000-litre truck. Its operation was automated and was controlled by a few employees, while

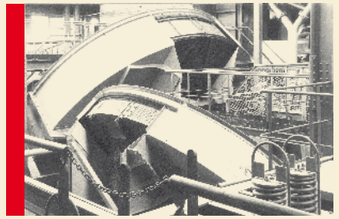
Panoramic view of the mining hub's coal processing system, including the washhouse (on the right).

Four conical spoil heaps are clearly visible at the rear of pit 11 in the 1950s.

up to 5 000 miners worked underground in the various pits around this hub. All mining equipment (hoisting engines, sheeve wheels, tippers, rails etc.) concentration tower are kept in the tower, which, together with the spoil heaps, are a landmark in the regional landscape.

The washhouse and the coal processing system

The modernisation effort included the installation of an efficient system for sorting and processing raw coal brought up from underground in order to extract all the fuel. The purpose of the washhouse was to separate the actual coal from stone, shale and debris coming from opencast mining sites. In order to do this, successive crushing, screening and washing operations were performed in order to eliminate impurities and to define different categories of product that a complex system of belt conveyors* would carry to storage or loading hoppers*. The washing system installed at 11/19 included the most modern equipment, including a Drewboy processing system. This device, derived from a machine used in sugar refineries to separate beetroot from stones, uses the difference in density between coal and shale by immersing them in a liquid comprising water and magnetite. The rocks sink to the bottom and the floating coal is retrieved and rinsed. Destroyed in 1993, this assembly formed a particularly complex system connected on one side to the hoisting engine and on the other to a rail* system used not only to transport coal but also to convey spoil* through the spoil disposal circuit. All washhouse equipment was remotely controlled from a central panel also comprising a mimic panel of the entire facility and constantly providing an accurate view of machine status. An operator used an intercom to communicate with the key parts of the facility (shaft station – spoil heap – loading facility – signal box) and with workers in charge of monitoring washhouse equipment.



Drewboy machine inside the 11/19 washhouse.

Spoil heaps

Formed out of rocky mine spoils, 3 spoil heaps (2 conical and 1 tabular) can be seen today. They make up a total volume of 24 million cubic metres spread across nearly 90 hectares. The two twin spoil heaps are among the highest in Europe, peaking at 186 metres. These extraordinary vantage points are also highly symbolic features forming the identity of the Nord-Pas de Calais mining basin. This series of spoil heaps was once larger in size as it used to comprise 4 conical spoil heaps and 1 tabular spoil heap. Two conical spoil heaps located to the north virtually disappeared after being mined in the 1970s to recover the shale contained in them.

A complex history of deposits

The deposits of pit 11 and the nearby pit 16 were initially formed on a flat spoil heap supplied by two railway tracks. The result was a crow's-foot shape, prompting the British to name it the "Double Crassier" (two slag heaps) during the First World War (1914-1918). The two conical spoil heaps (79 and 79a), which are currently being mined, were essentially formed during the interwar period. The first deposits consisted of debris from the pits and from mining villages 11 and 16, which were destroyed during World War I. The spoil heaps were then erected with earth excavated from the same pits up until 1952. They then started reaching their maximum allowable height. It was thus decided to erect the two new twin conical spoil heaps (74 and 74 a), which can still be seen. With production concentrated around pit 19, very large quantities of earth were brought up from underground and deposited on these spoil heaps as of 1960. In order to avoid potential subsidence, deposits stopped being added to these two conical spoil heaps in the 1970s, in favour of a tabular spoil heap (74b) that would cover a vast area between the 4 existing spoil heaps. A belt conveyor, of which two stacks can still be seen near the mine bypass (A21), was used to deposit spoil on this flat spoil heap that was equipped with a settling pond. The latter, also known as a sludge pond (*bac à schlamms*) was used to deposit sludge comprising fine shale dust from earth processed at the Vendin-le-Vieil washhouse. These deposits came to an end with the closure of 11/19 in 1986.

Aerial view of the spoil heaps.

Shale mining is coming to an end on spoil heaps 79 and 79a.

From the washhouse, a belt conveyor transported the spoil to the spoil heap base.

View of metal chutes used to spread the deposits evenly.

Combustion

In the early days of the mining industry, sorting methods were not advanced enough to recover all the coal. Rocky spoil (essentially shale) still contained substantial quantities of coal, generating an internal combustion process. This slow combustion process can take several decades and can reach temperatures of around 1000°c.

At the spoil heap surface, fissures varying in depth release some of the heat stored in the form of smoke and gas. This process transforms brittle black shale into red shale, which is more solid and highly sought after.

From mining to conservation

Of the 340 spoil heaps counted in the Nord-Pas de Calais mining basin in the 1970s, around 200 still exist today. Like the 2 conical spoil heaps no longer in existence, many were mined for shale, which is a component of road surfacing materials. Considered in the past as worthless spoil or as raw material reserves, a realisation of the spoil heaps' symbolic and scenic value, as well as their importance in terms of biodiversity, has resulted in initiatives aimed at preserving them and showcasing them for the past twenty years or so. The spoil heaps of base 11/19, standing out like oases of greenery in their urban surroundings, are home to diverse forms of wildlife including rare species. Thanks to their warmer microclimate (despite the absence of combustion, their black colour enables them to store the heat of the sun's rays) and lack of fertilizer and pesticides, they support special ecosystems including non-regional species like the hedge rose or the Senecio inaequidens. More than 300 plant species have been counted, as well as 100 bird species, 2 batrachian and reptile species, 17 mammal species, 13 dragonfly species, 24 butterfly species, 14 orthopteran species and 19 ladybird species.

Spoil heaps have now been incorporated into the Green and Blue Infrastructure of the Nord-Pas-de-Calais mining basin, a programme seeking to recapture natural and damaged spaces with the threefold aim of preserving the environment and the landscape, of educating the public in matters of the environment, and of developing recreational facilities. Now that these protected areas have been made safe and easily accessible, they have become recreational spaces ideal for walking or paragliding.

The *Centre Permanent d'Initiatives pour l'Environnement* (CPIE) run by the *Chaîne des terrils* association, a pioneering force in the conservation initiative, is developing an extensive scientific observation and educational programme within this space.

The spoil heaps are freely accessible. Because of their geological composition, they are still vulnerable spaces. In order to minimise soil erosion, care must be taken when visiting them by keeping to the proper routes and access paths.

"Construction" of the spoil heaps

The 11/19 deposits are large, modern spoil heaps that were built using a sophisticated system combining stability and size. Mine spoil was directly transported to the pithead base by a belt conveyor connected to the washhouse infrastructures. Spoil from the central washhouse at Vendin-le-Vieil was transported by train.
An extensive railway system controlled from a central signal box was built when the mining hub was established, in order to handle the various trainloads efficiently.

At the spoil heap bases, platforms were installed for loading deposits into skips*, which were then directed by rail to the top of the conical spoil heaps where they were deposited.
On the slopes, metal chutes channeled the earth in order for it to be evenly spread. This technique resulted in the formation of small, regular mounds or spikes that can be seen on the slopes.
As far as tabular spoil heap was concerned (74 b), spoil was deposited by means of a conveyor/spreader* system.

The site: an industrial wasteland in the 1990s.

Granted protected status, the site has escaped destruction and is now undergoing extensive development.

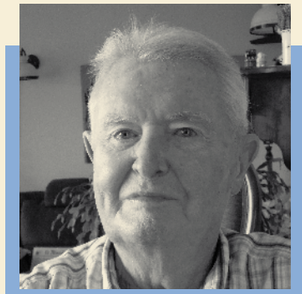
The old railway converted into a green corridor.

Equipped with extensions encased in Corten steel, the old workshop has been reconverted into an eco-business incubator.

Conservation and redeployment

Conservation: a real challenge

In the late 1960s, the pits comprising the mining hub started closing one after the other and pit 11/19 stopped operating on the 31st of January 1986.
The end of the coalmining industry heralded a period of deep economic and social crisis, accompanied by severe trauma. More than 200 000 mining jobs were lost in the Nord-Pas de Calais basin over the period spanning 1960 to 1990. In accordance with the terms of the mining code, the HBNPC* filled up the pits and started systematically destroying the facilities in order to recover materials and free up spaces for the creation of new businesses. Site 11/19 seemed naturally doomed to destruction. Aware of the site's historical value, its connection to the past and its redeployment potential, elected representatives, public stakeholders and lobbyists started taking steps to prevent its demolition. Acquired by the Loos-en-Gohelle municipality in 1990, it was occupied by the CPIE association *Chaîne des terrils* and by *Culture Commune* and *Scène Nationale du Bassin minier du Pas-de-Calais*. The same period saw the start of the heritage site registration process, a necessary step for its proper conservation. It was registered as a protected structure in 1992 and put on the historical register in 2009. On the 30th of June 2012, base 11/19 became one of the 353 structures within the Nord-Pas de Calais mining basin to be registered on the UNESCO World Heritage List.



Interview with Marcel Caron, former mayor of Loos-en-Gohelle

I was elected mayor of Loos-en-Gohelle in 1977, when mine pits were closing one after the other and facilities were being systematically razed to the ground. These closures were seen as a humiliating defeat, accompanied by a loss of hope and even by a feeling of public shame.
Pit 19 was to due to be shut down in 1982 and destroyed. It seemed unimaginable to me that there would be nothing left in the town bearing testimony to this industry that had had such an influence on the region. I felt it was essential to preserve a place that could bear witness to its past. Site 11/19 was emblematic: its two conical spoil heaps dominating the Artois plain, its pit top intact, its head frames, its arch of mining villages. At the time, it has to be said that neither the HBNPC, nor the elected representatives, nor the media were convinced.

I was taken for a backward-looking devotee of the past, unable to face reality. The plan to revive the coalmining industry, hatched by Pierre Mauroy's government, did nothing but delay the final date of this planned shutdown. Nevertheless, it gave me a few years of respite that I used as an opportunity to start occupying the spaces and raising the awareness of the public and local stakeholders. It started with the spoil heaps and the creation of the *Gohelliades*, as well as various cultural events designed to portray the site in a different light. Upon its closure in 1986, I had persuaded the HBNPC to hand it over to the municipality.

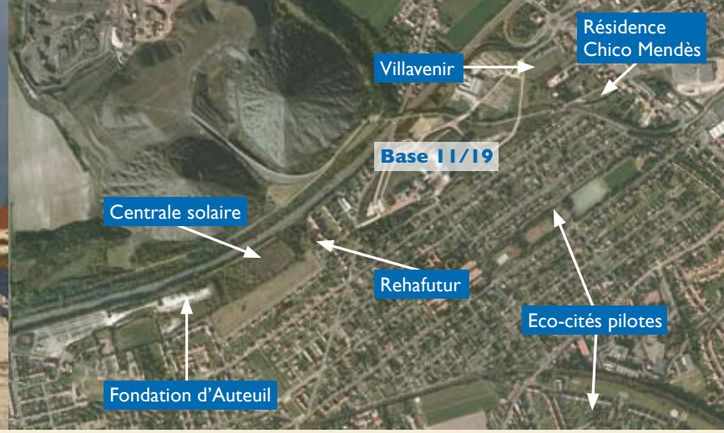
I then had to come to terms with the realisation that a municipality the size of Loos-en-Gohelle could not manage this huge wasteland, which was beset by terrible vandalism and safety problems. Reindustrialisation subsidies, combined with support from the *Etablissement Public Foncier Nord-Pas de Calais* and the site's registration as a protected structure in 1992, followed by the conurbation's acquisition of the site, were instrumental in making the site a safe space and saving it from destruction. As well as preserving the site, I also thought it should be made into a forward-looking space through a full-fledged development project. I was still not sure how this would happen, nor what direction the project would take.
I had explored a few avenues including a theme park on the industrial adventure and energy, without being entirely convinced. The support of my son Jean-François Caron was a decisive factor. He was the inspiration behind the idea that this site, symbolising the destruction of resources, the landscape and people, could embody a journey of revival supported by sustainable development.

Things started taking shape gradually, with the arrival and involvement of essential players like *Culture Commune* and *CPIE Chaîne des terrils*. Now, with the mining basin registered on the UNESCO World Heritage List, I think that a step change has occurred in the perspective that the public needs to move forward. The region's inhabitants must believe…

The eco-materials market.

High-energy-efficiency house forming part of the Villavenir programme.

The solar plant.



Key developments around base 11/19.

An exemplary redeployment project

From beginning to end, the conservation project has nurtured the idea of a recovery process where development initiatives show greater consideration towards man and the environment. The Lens-Liévin conurbation acquired the site in 2000 and initiated a vast development plan advocating the conservation of existing heritage sites and the creation of new functions using an innovative and exemplary approach to eco-development.

This change is being supported by the creation of a new access route to improve site transport services, the conversion of an old mining railway into a green corridor, the regeneration of an old workshop into an eco-business incubator in accordance with HQE standards, the installation of heritage signs and the construction of an eco-material market by the eco-business development centre (CD2E). Based on experimentation and cooperation between stakeholders, this approach combines economic, cultural, social and environmental aspects to form a workable sustainable development project. The symbol of a full-fledged image reversal in the making, the site is now recognised as a benchmark when it comes to redeployment and development.

Innovative pilot programmes are being developed around the old pithead. In 2010, a photovoltaic power plant was built in order to study and try out new solar technologies. It is expected that the facility will eventually comprise nearly 1 600 square metres of transmitters, spread over 2 hectares of land, with a view to assessing around ten photovoltaic technologies and piloting them for different applications. The facility could ultimately achieve an annual output of 180 000 KWh and incorporate other renewable energies.

In terms of accommodation, the first HQE housing project, the Chico Mendès apartment block, was built near base 11/19 in 2000.
In 2009, six high-energy-efficiency houses (two built of brick, two built of wood and two built of steel) were inaugurated as part of the Villavenir programme. Built by the *Fédération Française du Bâtiment*, these dwellings use about one hundred new green construction technologies and techniques. This operation is being used to test them in real conditions, to promote the development of innovative businesses working in these fields, and to set up a dedicated training programme.

The Auteuil apprentice training centre.

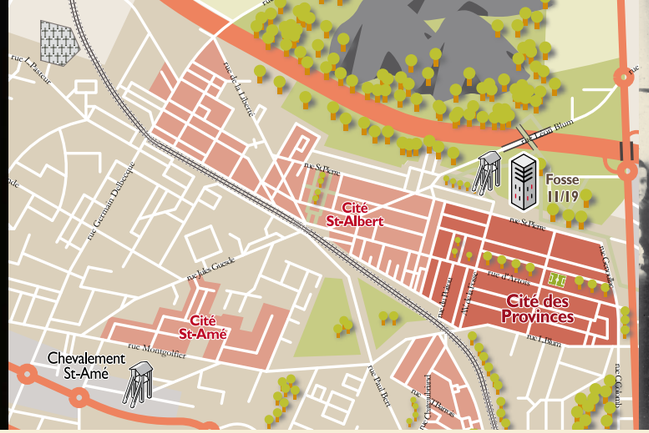
Other innovative projects are also underway, focusing on the regeneration of surrounding mining villages located at Loos-en-Gohelle, Lens and Liévin. Tying in with the registration of the Nord-Pas de Calais mining basin on the UNESCO World Heritage List, the development of these mining villages forms part of an initiative designed to preserve and showcase the urban, architectural and scenic features to which they owe their integrity and authenticity.

Hanging together with the Louvre-Lens park and the initial projects of the Euralens urban development plan drawn up by landscape architect Michel Desvigne and urban development architect Christian de Portzamparc, the Provinces mining village is also being developed to meet today's urban, social and environmental needs, as part of a pilot green housing development project.
In the same vein, the Rehafutur project entails an environmentally friendly regeneration operation involving 6 dwellings and one former engineer's house. Designed to accommodate 350 students a year as of September 2013, the training centre specialising in environmentally friendly construction and run by the *Fondation des apprentis d'Auteuil* is now being built at the spoil heap base.

The old pithead is now the showcase and centre of a wider sustainable development hub combining innovation and preservation of local heritage.

Dance show in the tower of pit 19, during the transnational meetings in 1991.

Lighting of the head frame during the European Heritage days in 2010.



The infant medical clinic in the Provinces mining village.

Interview with Chantal Lamarre, director of *Culture Commune*

I fell in love with the site the first time I visited it with Marcel Caron in 1988, when I was given the job of organising a festival for the mining basin. Culture Commune set up its premises on base 11/19 10 years later after many trials and tribulations.
During this period, the creation of Culture Commune and the flourishing of artistic activities in particularly tough conditions played a decisive role in the site's conservation. To begin with, the shows that were staged were an opportunity for carrying out some essential conservation work. More importantly, they turned the spotlight on base 11/19 and brought about the change in perspective needed for its conservation. The efforts we have put into this place are the result of an ongoing commitment based on the belief that the site meets all the criteria for a "new generation of spaces".
The idea is for life on base 11/19 to revolve around an artistic, cultural and social project rooted in commonality, cooperation and exchange.
We are working to unite and establish dialogue between inhabitants of the surrounding mining villages and those coming from further afield, including artists, economic players, tourists, sportsmen, academics, urban planning professionals, cultural professionals and environmental protection professionals, with a view to reviving the region's cultural life.

The square in front of base 11/19 is regularly used for shows.

Provinces mining village

The location of mining sites and mining villages built for miners was governed by a statutory framework enabling companies to set up their infrastructures to suit their own needs within their concession – without having to take account of municipal restrictions or planning projects.

Initially attached to pit 11, the Provinces mining village was one of the facilities that closely combined the mining site and miner dwellings. With construction starting in 1894 in the towns of Lens, Liévin and Loos-en-Gohelle, the village initially took the form of a housing estate comprising 300 houses grouped together in pairs in the middle of huge vegetable gardens.

At the time, the *Société des Mines de Lens* was already building "comprehensive" villages combining dwellings with a variety of amenities for religious worship, education and charity work. This policy was designed to attract, secure and get the most out of its manpower by giving miners and their families access to services that society could not provide them with. In the Provinces mining village, a school complex was built in 1897.
In 1899, while construction began on around a hundred more houses, work started on the Saint-Pierre church and a domestic science unit was added onto the girls' school. In 1901, a cooperative was built and the church was inaugurated. The following year, the company founded the "Œuvre de la Goutte de lait"* (mother and baby unit) and an infant medical clinic. In 1906-1907, the facility was expanded with the addition of a dressmaking studio, and the village hall was inaugurated. The village then comprised around 600 worker dwellings.

These amenities reflected both an awareness of health-care theories and the determination of the *Société des Mines de Lens* to assert its power. They also revealed the company's paternalistic management style and its desire to control the miners and their families in all aspects of their lives (work, living quarters, health, education, leisure activities, etc.). Just like the pithead, all these facilities were destroyed during the First World War.

View of the mining village in the 1920s. In the foreground, rails used for clearing the ruins and for reconstruction work.

Houses featured an interesting variety of models, materials and décors.

Two large tree-lined squares enhanced the quality of life.

Village hall façade.

Reconstruction of the mining village

Dwellings

In his writings, Ernest Cuvelette points out that of the 8 000 dwellings owned by the *Société des Mines de Lens* before the First World War, only 33 could be restored.

In the early 1920s, all village dwellings had to be rebuilt. While fashion tended more towards garden cities, the village's checkerboard layout was not significantly changed on this occasion. For purposes of economy and speed, the *Société des Mines de Lens* largely reused the foundations that had been spared from destruction.

Efforts were nevertheless made to give these large housing estates a less monotonous appearance by varying the dwelling models. Nearly 15 different types were counted in the Provinces village. Dwellings featured the architectural and decorative characteristics of the "style" developed by the *Société des Mines de Lens*: variety of façade designs and roof sizes, alternation of materials (brick, millstone, concrete) and decorative features essentially comprising fake half-timber exteriors in plaster or painted brick. Each house contained 2 to 3 flats, all equipped with water and power supplies, a cellar, an attic and annexes (laundry, rabbit hutch, shed, aviary, etc.).

Dwelling types also included special models reserved for engineers, managers, porions* (foremen), parish priests, doctors, headmasters and headmistresses. Their imposing size, their ornamentation and their respective positions were a reminder of the authority exerted by those who supervised the miners and their families.

Rebuilt in the 1920s, the Provinces village contained around 800 dwellings and housed a population of 3 500 to 4 000 inhabitants.

Amenities

While the village was being rebuilt, the Société des Mines de Lens remained faithful to its model of a comprehensive mining village including various amenities that made them self-sufficient.

While the village's general layout and arrangement of dwellings did not undergo significant changes, the installation of amenities brought about substantial improvements.
The girls' school and the dressmaking studio initially installed on the Place de Lorraine were moved closer to the church and the boys' school. As the village hall was not rebuilt, this new layout was accompanied by the construction of a gym near the boys' school and of a concert hall and cinema near the girls' school.

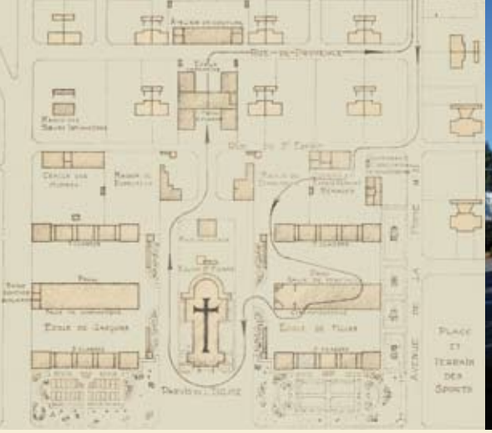
Almost all educational facilities and charitable organisations were thus brought together in the heart of a model village.

The design of school entrances, the variety of roof sizes and the use of millstone determined the buildings' architectural quality and made the whole village a real showcase for the company's regained power.

The *Mines de Lens* village hall

Inaugurated in 1907, the village hall stood at the end of the village's huge tree-lined square. It was a multi-purpose building, which offered inhabitants and families living in neighbouring villages a variety of services.

The actual village hall served both as a concert hall and as a gym, to which was attached a meeting room reserved for employees, a refreshment room, changing rooms for gymnasts, a bathhouse and other rooms reserved for the "Œuvre de la Goutte de lait". The building sported rich decorations reflecting mining scenes and miner attributes (lamps, tools, etc.). The concert hall could accommodate around 800 people. In normal periods, benches would be replaced with gymnastic apparatus used by the village's gymnastic society. For concerts, the stage was equipped with a full set of props. A screening system was also available for showing films. The village hall was also used for concerts put on by the company's music societies (choirs). In the meeting room, employees had access to a library, a billiard table and various games. A bathhouse was provided free of charge for use by gymnasts. Inhabitants of the village could also use it in exchange for a modest sum of money. Destroyed during the First World War, it was never rebuilt.



Layout of the Provinces village amenities.

Schools reflect the care given to the architectural quality of village amenities.

In the late 1920s, the village boasted remarkable urban, architectural and scenic qualities.

Domestic science

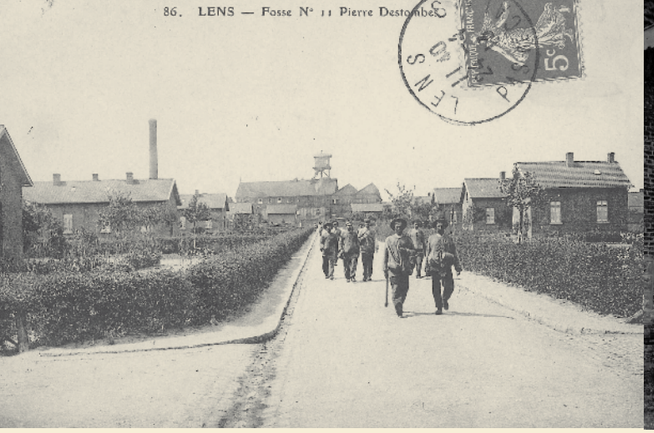
The following text is taken from the publication of a conference on the reconstruction of the Mines de Lens, delivered by Ernest Cuvelette in 1925.
It sheds light on the role assigned to miners' wives and the methods employed to teach them this role in accordance with the paternalistic hygiene principles advocated by the Société des Mines de Lens.
"The domestic science unit comprises a sewing and meeting room, commonly known as the workroom, a kitchen/dining room, a laundry, and a school garden to which are attached a model chicken coop and rabbit hutch (…). Daughters of the company's employees and workers are admitted upon simple request (…).

In the workrooms, young girls are taught several kinds of needlework and basic cutting principles. One day of the week is devoted to darning; pupils bring torn or worn household linen to school and work under the supervision of the sewing mistress. The other days are given over to the making of new linen and simple clothes (…).
The Société des Mines de Lens provides all supplies free of charge. As an incentive, it also grants prizes to each pupil, such as table linen, bathroom linen and kitchen linen, which will be very welcome additions to their trousseau. Cooking is taught under the supervision of two mistresses. Two lessons a week are devoted to practical cooking exercises; they involve the preparation of a midday or evening meal, preceded by a theory lesson lasting about half an hour (…).
The cost and weight of all substances used to prepare the meal are recorded in the expenditure log kept by the other young girls attending the lesson; they thus learn to appreciate the cost of things and to realise that the cheapest food can also be the most substantial (…).
In the school garden, the young girl is taught the working principles applied by her father or brothers in their gardens, and the way in which she can and must contribute; it is indeed the housewife who is familiar with cooking needs, who remembers when to sow and bed plants, who does the weeding, who waters the plants and who picks vegetables; it is also she who tends the flowers. Practical exercises are accompanied by theoretical explanations and by lessons on hygiene, home economics and household accounting."

Saint-Pierre church

In 1894, a temporary chapel was built in the Place de Lorraine. Construction of the Saint Pierre Church started in 1899, at the same time as construction started on village 12 (Saint-Edouard). Built to the plans of renowned architects Louis-Marie Cordonnier and Louis Croin, it was sanctified on the 2nd of September 1901.
Just like the pit, the village church was dedicated to Saint Pierre in honour of director Pierre Destombes.
Dominating the entire village with its two church towers, this vast edifice was destroyed by bombs in 1914.

In 1923, a new church was built to the plans of the same architects and was sanctified on the 4th of December 1925. With the exception of a rose window on the main façade, the architecture was not very different from the pre-war building. This colossal church, which occupied the heart of the village, could be seen from far away and was a powerful symbol for the mining population. However, it fell into disrepair as a result of subsidence and a lack of maintenance. It was finally destroyed in 1987. Standing in the midst of the schools and charitable organisations, the church was also epitomised the moral control that it exerted over the mining population with support from the managers of the *Société des Mines* de Lens. Those who wanted jobs for their children, better accommodation or an easier job were advised to have their children christened in the church, to attend Sunday mass and to be seen by the engineer. This cooperation between the Church and management was also reflected in the role assigned to the nuns in terms of teaching and charity work inside the village (initiation to cooking and sewing, teaching of childcare principles, assistance with running the clinic, etc.).



Miners coming back from the pit.

Although gardens were regularly inspected, they were nevertheless free and open recreational spaces that were particularly appreciated by miners after finishing work underground.

Life in the Provinces mining village

In this town within a town, closely watched over by "mine guards", typical daily life in the Provinces mining village was that of a mining village for about one hundred years, punctuated by the departures and returns of miners from the pit.

After their working day, miners would indulge in gardening. They also relaxed by playing in the brass band, by practising archery and by playing football or bowls, throwing the "javelot", playing "billon" or indulging in pigeon racing. Traditionally, miners' wives took care of the home and young children. For the company, they were a stabilising factor in the life of the village. The training provided in the workshops was not intended to give them a professional grounding, but was meant to help them prepare for their future role as housewives and workers' wives. In addition to the famous ducasses* (fairs), the lives of miners and their families were punctuated by numerous festive occasions: christenings, communions and weddings were truly joyful occasions, just like balls or the feast of Sainte-Barbe (patron saint of miners). Of Belgian, French, Polish, Italian and North African origin, miners and their families shared this daily life inside the village. They all knew each other and shared the same values of mutual help and solidarity, which form an entire chapter of mining culture.

The garden in the mining village

As in all miner dwellings, each family had a garden. In the Provinces village, these gardens were particularly large with surface areas ranging from 250 to 800 square metres. Delineated by low concrete fences and hedges, they were open, visible spaces forming part of the village's landscape and contributing to its quality of life. Gardening was a healthy recreational activity and was subject to inspection (gardens were inspected by the mine guards). Company management encouraged gardening as it took up a lot of time, thus keeping miners away from the taverns, which were known to be the lair of trade union representatives.

A gardening lesson.

Glossary

Aboveground: Surface infrastructures and jobs, as opposed to "underground".
Belt conveyor: A belt consisting of a soft material driven and supported by motorised pulleys, primarily used to convey coal and spoil.
Cage: a lift used to transport trucks and miners up and down the mineshaft.
Ducasse: Name given by people in the Nord to fairs and funfairs.
HBNPC: Houillères du Bassin du Nord-Pas-de-Calais (following nationalisation).
Hopper: A large funnel or silo used to store and tip out coal and rock through the effect of gravitation.
Lamp room: A pithead building where miner lamps were stored, maintained and handed out.
Low/high-volatile coal: coal is a sedimentary rock formed from plant matter. Coal is categorised into several types, depending on its carbon and gas content (low-volatile coal burns less easily than high-volatile coal).
Mine cart: a cart on rails used for transporting coal through the tunnels and for hauling it up from underground in cages.
Mining railway: A railway used to convey equipment and coal.
Œuvre de la Goutte de lait: In addition to the infant medical clinic, this system was designed to provide newborns with mother's milk or sterilised milk in order to combat infant mortality.
Pithead: All facilities at the surface of a mine.
Porion: Foreman or team leader supervising work underground.
Shaft lining: A structure consisting of wooden (or sometimes cast-iron) pieces used to seal the shaft in water-bearing ground.
Silicosis: A lung disease caused by inhalation of silica dust particles in the mines.
Sinking: Digging of a new mine shaft.
Skip: Large container used in the mining industry.
Sorting: Separation of coal from earth and rock.
Spoil: Matter formed of soil and excavated rock after commercially viable ore is recovered.
Spreader: Attached to the end of the belt conveyor, this mobile wheel or track-mounted device spreads the spoil over the spoil heaps.
Underground: Underground infrastructures and jobs (shaft, tunnels), as opposed to "aboveground".
Unloading dock: A space on the pithead reserved for the unloading of full trucks before returning them to the cage.
Ventilation: a system for pumping fresh air into the tunnels.

Le Pays d'art et d'histoire de Lens-Liévin

Principaux sites de découverte du patrimoine minier

Héritage technique

- Tour d'extraction
- Chevalement
- Terril
- Etang d'affaissement
- Gare ferroviaire
- Bâtiment administratif

Héritage social

- Cité pavillonnaire
- Maison d'ingénieur
- Château patronal
- Equipement de la Société de Secours Minière

Autres sites

- Site commémoratif
- Musée

Sources : MBM, OTP Lens-Liévin, CAHC
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CARTOGRAPHIE mission bassin minier NORD - PAS DE CALAIS

Le Bassin minier inscrit au Patrimoine mondial de l'UNESCO

Le périmètre du bien inscrit au titre du paysage culturel évolutif vivant, la zone tampon et les 4 grands sites de la mémoire

Fosse 11/19 - Rue Léon Blum 62750 Loos-en-Gohelle
Fosse 9/9bis - Rue du Tordoir 62590 Oignies
Fosse Delloye - Centre Historique Minier - Rue d'Erchin 59287 Lewarde
Fosse Arenberg - Rue de Croy 59135 Wallers

More than 1200 mining heritage items have now been recorded.
Those on the World Heritage list include 353 items that were selected on the basis of demanding criteria, accounting for 25% of the total.
The perimeter covers 87 municipalities and includes, among others: 17 significant pits or remains; 21 head frames;
51 spoil heaps; 54 kilometres of rail track;
3 railway stations; 124 mining villages;
38 schools and school complexes;
26 religious buildings; 22 health facilities;
7 collective facilities: village halls, trade-union building, sports facilities; 3 "large offices" (Grands Bureaux) belonging to mining companies; 4000 hectares of landscape. As required by the world heritage centre, a buffer zone has also been established around the perimeter. It contains manmade and natural objects and structures, which, without meeting the criterion of outstanding universal value, provide interesting insights into the history and landscape of the mining basin.

For more information, check out the interactive heritage atlas of the Nord-Pas de Calais mining basin:
www.atlas-patrimoines-bassinminier.org

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Cover photo:
Overall view of the site from the spoil heaps.
Half of cover: Head frame of pit 11 and tower of pit 19.
Quarter of cover, top:
Head frame of pit 11, illuminated in 2010.
Quarter of cover, bottom:
Miners descending into pit 11.

The "Pays d'art et d'histoire" label is awarded by the Ministry of Culture and Communication to communities that have committed themselves to a holistic policy of preserving and showcasing their heritage.

Towns and regions of artistic and historic interest (Villes et Pays d'art et d'histoire) form a nationwide network of which the aim is to share the most innovative experiences.

The nearby towns of Boulogne-sur-Mer, Cambrai, Lille, Roubaix and Saint-Omer have been awarded the "Ville d'art et d'histoire" label.

For more information on local heritage and activities of the "Pays d'art et d'histoire":
Maison syndicale des mineurs
32 rue Casimir Beugnet
62300 LENS
03 21 67 66 62
pole-patrimoine@tourisme-lenslievin.fr

For guided tours of base 11/19 and for more information on the spoil heaps:
Office de Tourisme
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62300 LENS
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info@tourisme-lenslievin.fr
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