




Gobierno del
Principado de Asturias



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BUENAS PRÁCTICAS

Operaciones Cofinanciadas

**Water Treatment Plant from El Franco
Council.**

Junta de Saneamiento

Programa Operativo del Principado de Asturias

Fondo Europeo de Desarrollo Regional

Año 2017

Presented as Good Practice the works concerning the second phase of the **Water Treatment Plant from El Franco Council**.

These works, destined to increase the capacity of the purification of the existing installations throughout the construction of a biological line treatment, have represented a 2.23€ Million investment, of which 80% have been financed by the European Union through FEDER, within Asturian Operative Program 2014-2020.

The proceeding has been designed to assist a population of 17,432 equivalent inhabitants.

It is a work plan considered in the Master Plan of the Waste Water Sanitation of the Principality of Asturias, located in the occidental coast city of El Franco, close to the core of Vialvélez, inside a land plot located at the higher area of a cliff.



Aerial Views from purification facilities

The objective of the works, above mentioned, has been the incorporation of a biological treatment line to the existing pre-treatment facilities, allowing this way a drastic decrease of the pollutant load contained in the urban effluent spilled into the sea after its treatment.

At the same time to the biological treatment execution a corresponding sludge treatment line has been developed, which allows their dehydration, reducing their volume and easing transportation and ulterior management.



Front view from the sludge treatment building

The secondary treatment line built consists of a prolonged aeration active sludge biological reactor, configured in a system ORBAL ® type, with three oxidation channels. This system, besides ensuring a drastic decrease of the organic pollution in the effluent, permits to reach important reductions of the nitrogen and phosphorus contents.



Biological Reactor and Secondary Decanting Execution Panoramic view

This proceeding is considered a good practice because fulfills the following:

- **High broadcast between beneficiaries and general public:**

At this point, a series of communication proceedings which have permitted the commitment of the objectives set in the broadcast of the Finance Program of the European Union, through FEDER.

According to this there is an information sheet on the website describing the project management.



It has conducted insertion of execution adverts press releases in the media such as La Nueva España and El Comercio newspapers.

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EDAR EL FRANCO

La infraestructura tiene por objeto aumentar la capacidad de depuración de la Estación Depuradora de Aguas Residuales del concejo de El Franco mediante la construcción de una línea de tratamiento biológico y de fangos, y de este modo mejorar la calidad del efluente que se vierte al mar.

Las obras realizadas han contribuido a dar cumplimiento de la Directiva Marco del Agua y se encuentran cofinanciadas por el Programa Operativo FEDER de Asturias 2014-2020.

Furthermore, there have been adds in digital press, specifically in La Nueva España.



In all cases informing at all moment of the co-financed mode through the European Fund of Regional Development (FEDER).

- **The proceeding includes innovative elements:**

It's included as an innovative element the reform of the Waste Water Sanitation Station (WWSS), which determinant factors in their conception and in the design, have been either the location in the land plot as the caring of the environmental characteristics. In this way, it's been pursued the environmental increasing integration, reducing the visual impact and making sure to guarantee the optimal disposition of the buildings and their inherent elements.

It is also innovative the secondary treatment (biological treatment) and sludge, and so this way to improve the quality of the effluent spilled into the sea, since previously the sewage could only receive the first phase of the purification process (pretreatment). It is relevant at this point the biological reactor to reduce the organic material, the nitrogen and the phosphorus. Furthermore, it is important to note the infrastructure of secondary decanter for separating the sludge of the treated water and the sludge treatment, which will thicken and dehydrate for ulterior removal.

- **Adjustment of the obtained results to the preset objectives:**

The objet to pursue is the elimination of the produced discharges to Salgueiras and Pormenande streams, in cesspools and lower areas of the area properties. The mechanical and electrical equipment needed for the existing sanitation were determined and the new networks through which the discharges existing in the environment are conducted to the point whereas the purification system is for their ulterior treatment.

The works will allow the discharges to arrive clean to the sea improving significantly the quality of the water of one of the best preserved Asturian Coastal strips, from an environmental point of view. Besides it complements the first phase of the sanitation and purification municipality project, with provides sanitation and purification network to the man cores of the council: Valdepareas, San Pelayo, Viavélez, La Caridad, Arboces and Castiello.

- **Contribution to the problem resolution or regional weakness:**

The project allows to avoid the discharge of sewage into the sea without previous treatment. It composes a huge valuable proceeding for the territory which also contributes to preserve the coastline and to improve the quality of life.

It comes out as a necessity of developing a biological and sludge treatment, that were not fulfilled in the sanitation and purification project of the El Franco Council, so it allows the connection between the effluent and the purification system with the submarine emissary.



- **High Grade Coverage to the targeted population**

The proceeding has been designed to assist a population of 17,432 equivalent inhabitants' due to its infrastructure has been planned to incorporate in the next future more population centers or industrial areas capable of settling down in the zone.



Viavélez Port

- **Consideration of the horizontal criteria of equal opportunities and environmental sustainability:**

The project contributes to the improvement of the environmental sustainability due to its appropriated location and integration within the WWSS environment, so does like improving in a high grade the quality of the coastal waters. This kind of investment, besides to provide financial and social values – due to its positive impact in the protection and preservation of the ecosystem and landscape.



White Cape (Cabo Blanco)

The Purification Station of Waste Waters connected to the submarine emissary will allow these waters, previously treated, to be spilt into the sea with a higher environmental protection, minimizing biohazard damages to bathing and fishing areas.

The principle of equal opportunities is guaranteed since in the selection of the hiring company there has to be taken into account technical criteria without any existence of gender discrimination.

- **Synergies with other policies or public intervention system:**

The infrastructure completes the ambitious sanitation and purification proceedings, promoted by El Franco Council since late 2009, once accomplished the first phase of the works and further construction of the submarine emissary, both co-financed by FEDER, inside the Operative Program of Asturian Principality 2007-2013.

The works performed have contributed to fulfill the Water Framework Directive.

The intervention joins other major sanitation and purification waste water works developed within the occidental zone of the region, such as Eo's estuary and municipalities of Navia and Coaña.