



MONGE, LAURA

Civil Engineer
HEAD OF WASTE AND
CONTAMINATED SOILS AREA



PURIFICATION, ANALYSIS AND LABORATORY MANAGEMENT SERVICE, TECHNICAL ASSISTANCE TO THE PROJECT MANAGEMENT AND MONITORING FOR SPACES AFFECTED BY HCH CONTAMINATION

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SARGA, INSTRUMENTAL COMPANY OF AUTONOMOUS COMMUNITY OF ARAGON

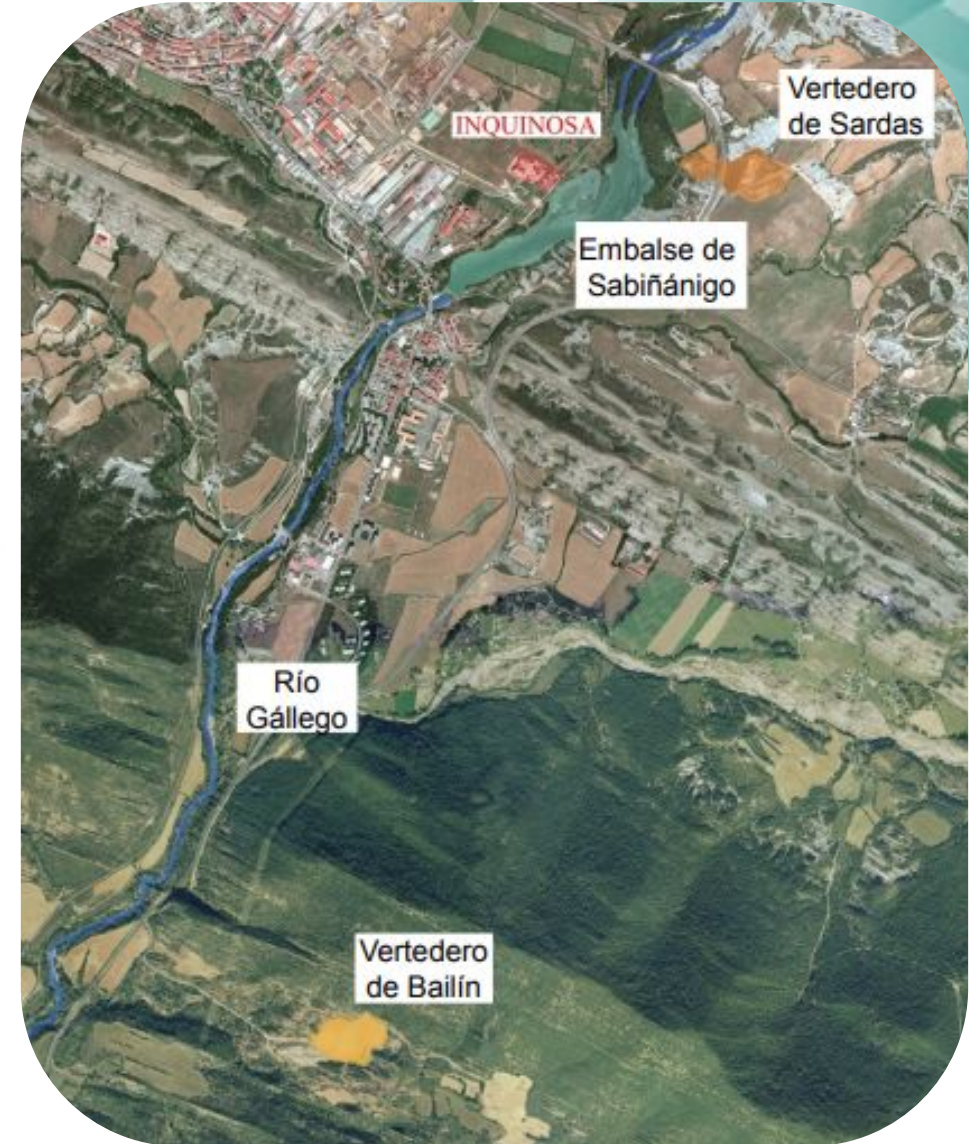
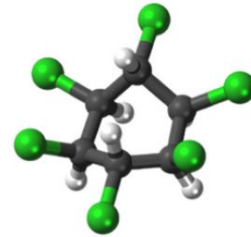
SARGA is an instrumental company of the Government of Aragon, a personalized own medium, supervised by the Department of Agriculture, Livestock and Environment, which by its nature of public company has as sole shareholder the Public Business Corporation of Aragon.





- **BACKGROUND LOCATION ENVIRONMENTAL MONITORING SITE**
 - WATER QUALITY
 - AIR QUALITY
 - SOIL QUALITY
 - ECOLOGICAL STATUS STUDY
- **MAINTENANCE, OPERATION AND MANAGEMENT**
 - WATER AND LEACHATE TREATMENT PLANTS
LABORATORIES
AUXILIARY INFRASTRUCTURES
- **TECHNICAL ASSISTANCE: REPORTS, PROJECTS AND CONSTRUCTION MANAGEMENT**
- **TESTS AND RESEARCH**
HEALTH AND SAFETY COORDINATION

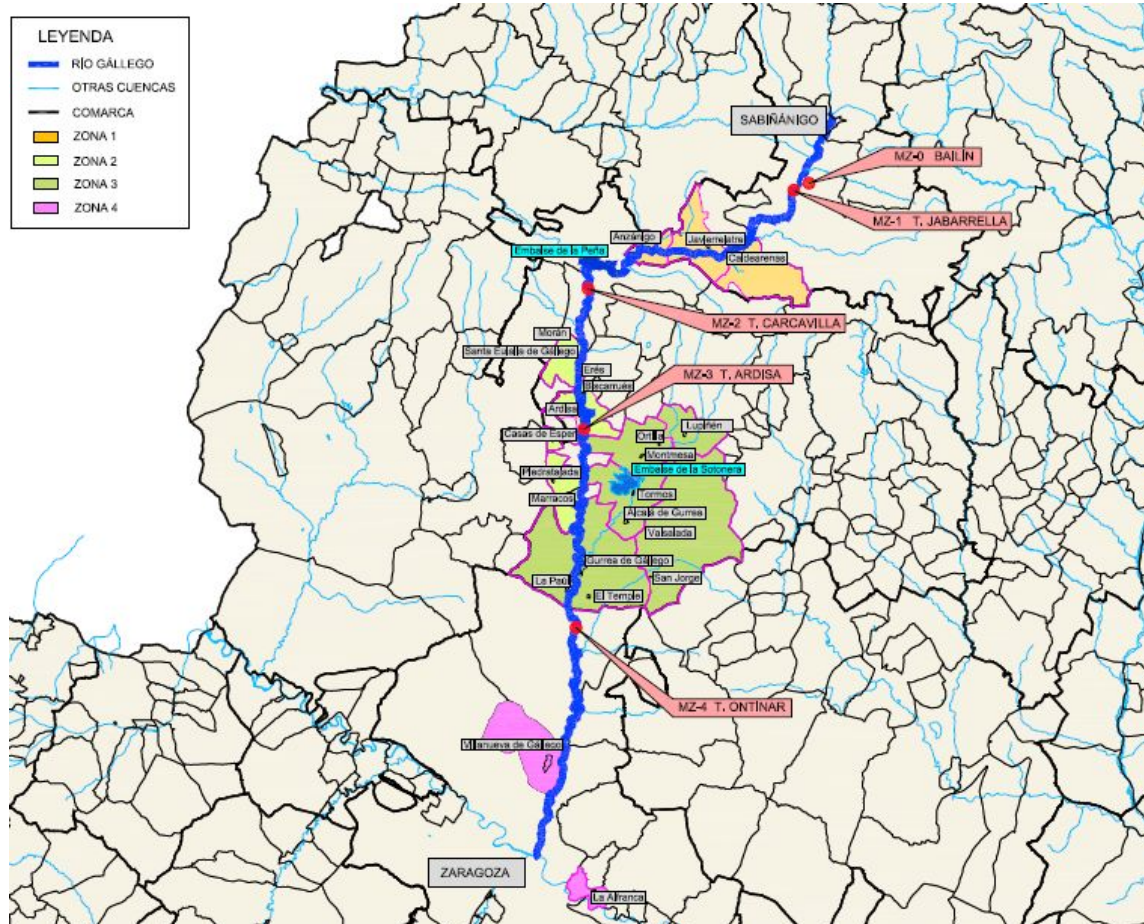
BACKGROUND EMPLACEMENT



ENVIRONMENTAL MONITORING

WATER QUALITY

MONITORING PROTOCOL FOR THE GÁLLEGO RIVER



- MZ-0: Bailín ravine
- MZ-1: Jabarrella reservoir
- MZ-2: Downstream of the Carcavilla power station
- MZ-3: Gállego canal
- MZ-4: Ontinar dam



ENVIRONMENTAL MONITORING

AIR QUALITY

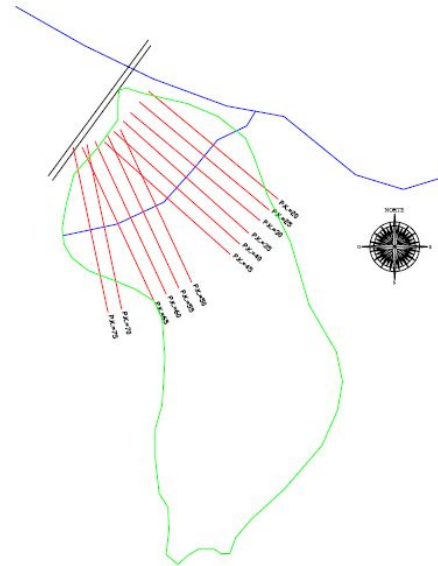
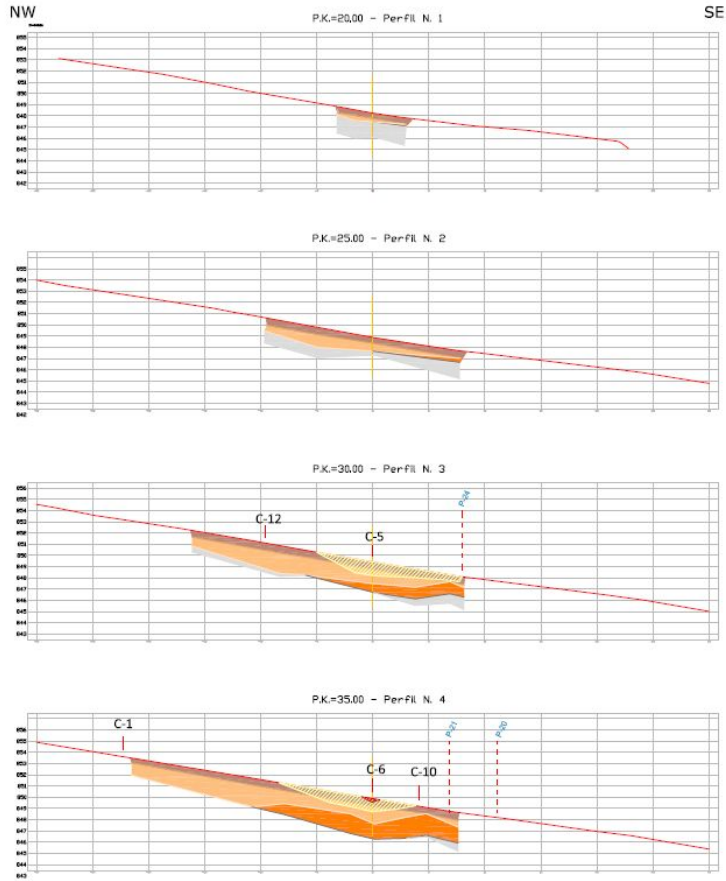
AIR QUALITY MONITORING NETWORK SPREAD OVER 11 POSITIONS

- GASES
- SEDIMENTABLE PARTICLES: more than 10µm
- PM10 ($\leq 10 \mu\text{m}$) and/or PM 2.5 ($\leq 2.5 \mu\text{m}$) PARTICULATE PARTICLES



ENVIRONMENTAL MONITORING

SOIL QUALITY



C-10 Calicatas campaña 2018
P-30 Puntos de investigación 2017

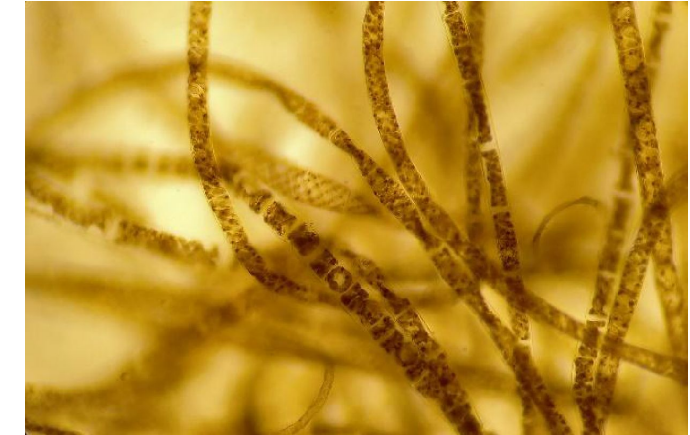
Tierra Vegetal (0,3 m)
Limo arenoso (relleno)
Arcilla limosa
Grava limosa

[ΣHCH] < 1 mg/kg (NGR uso industrial)
1 mg/kg < [ΣHCH] < 37 mg/kg (ACR)
37 mg/kg (ACR) < [ΣHCH]



ENVIRONMENTAL MONITORING

ECOLOGICAL STATUS STUDY



MAINTENANCE, OPERATION AND MANAGEMENT

WATER AND LEACHATE TREATMENT PLANTS

SARDAS



BAILÍN 1



SARDAS

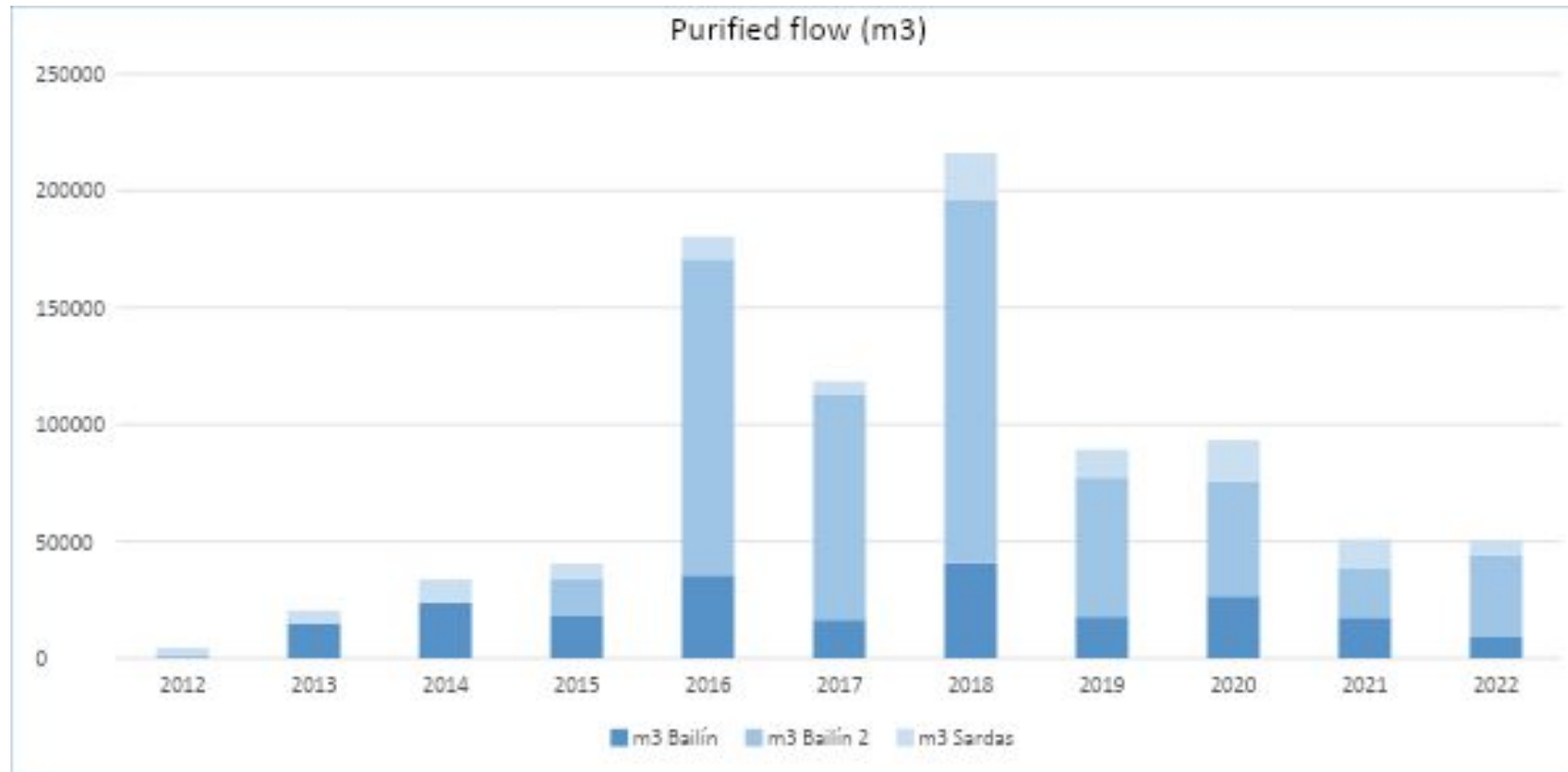


BAILÍN 2



MAINTENANCE, OPERATION AND MANAGEMENT

WATER AND LEACHATE TREATMENT PLANTS



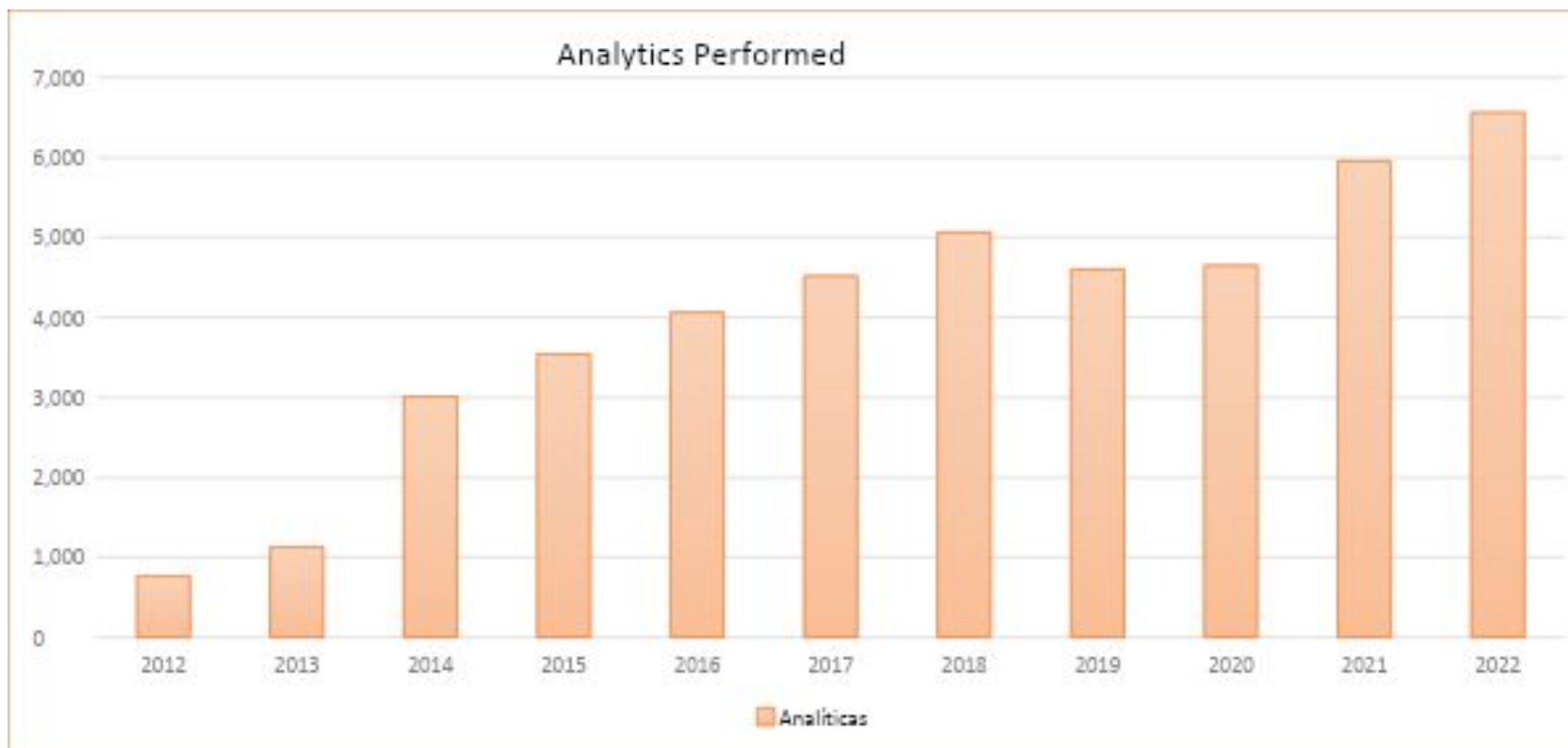
MAINTENANCE, OPERATION AND MANAGEMENT

LABORATORIES

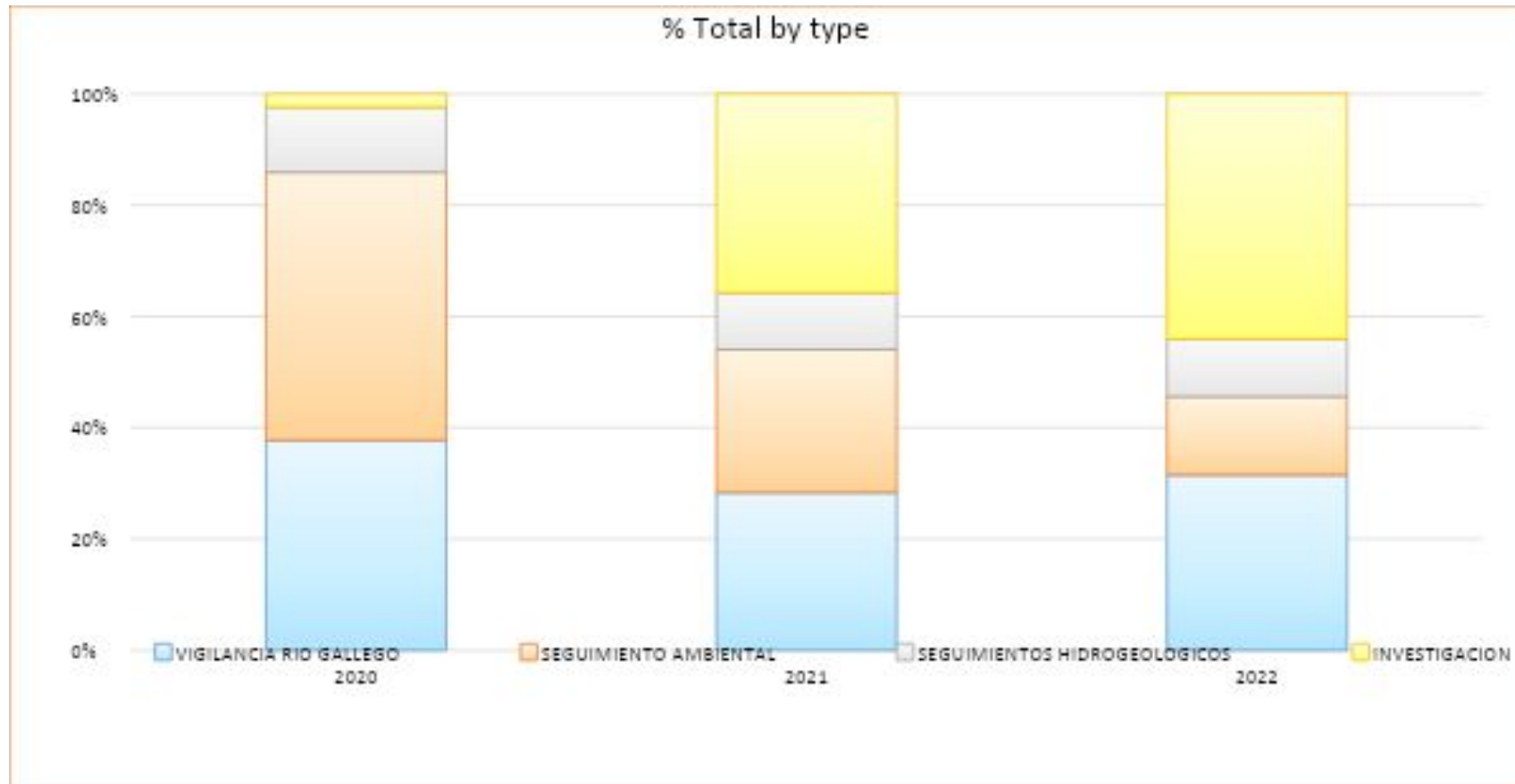


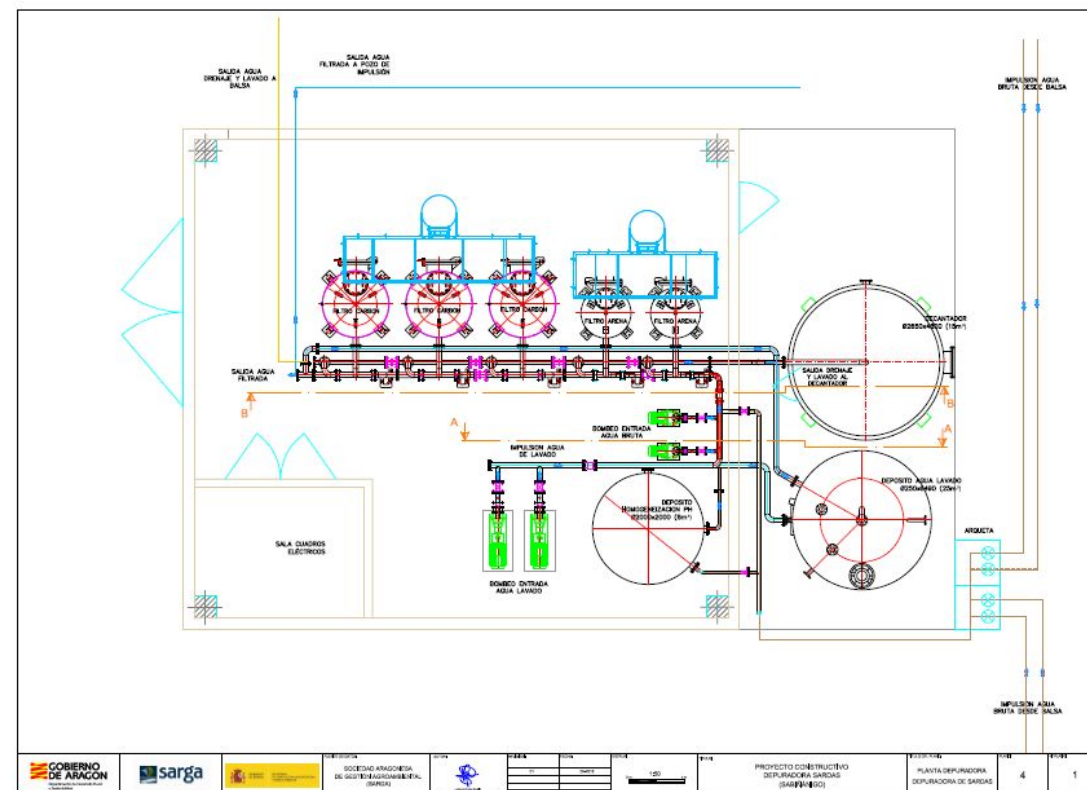
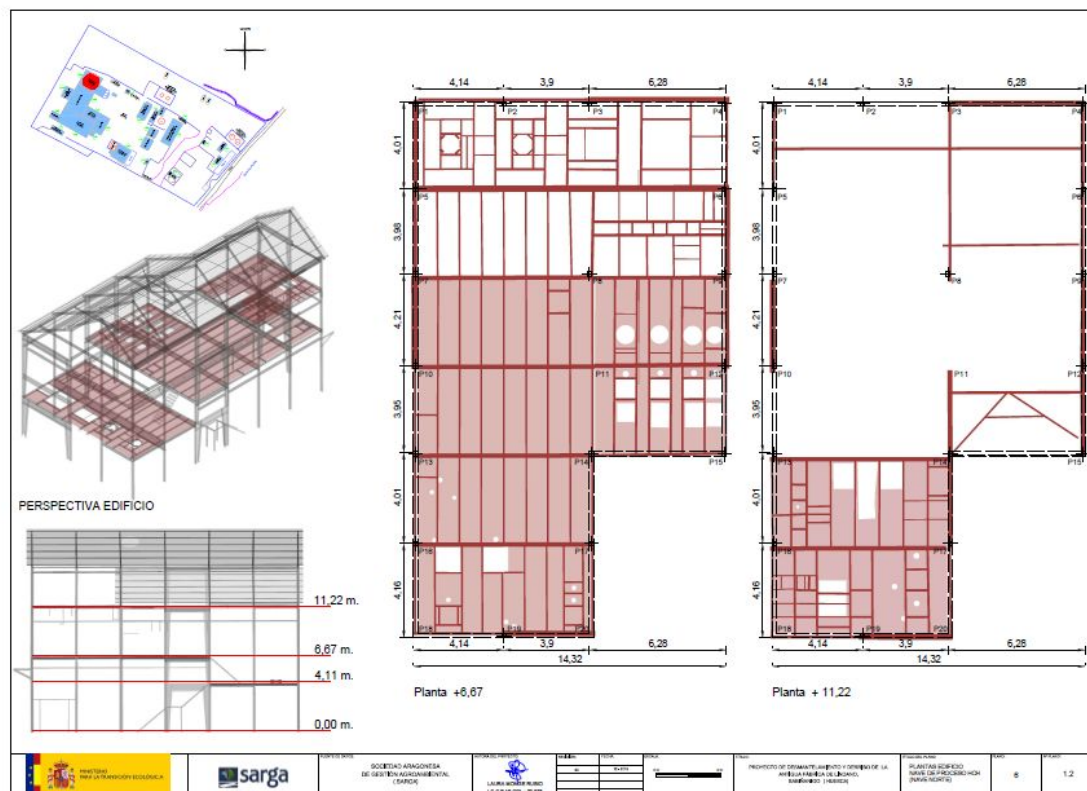
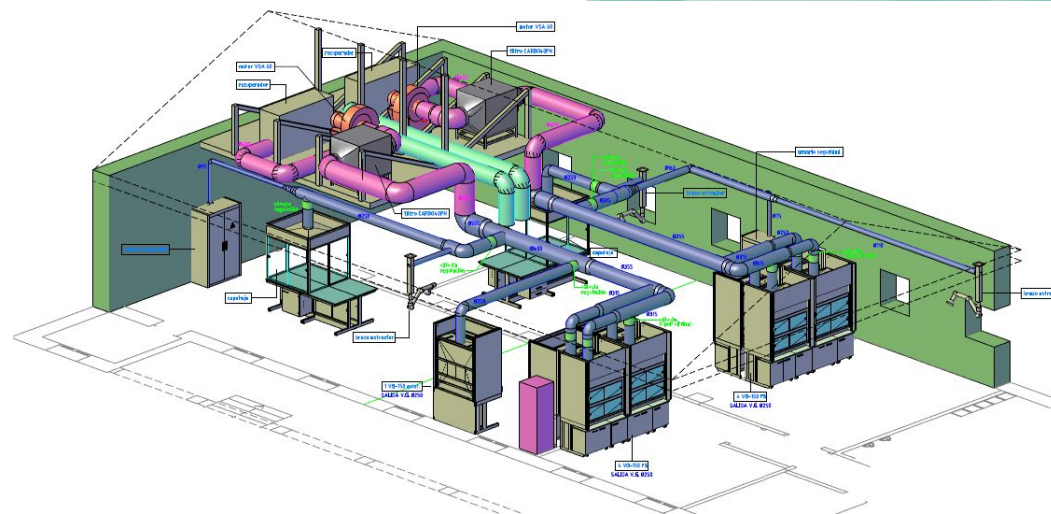
MAINTENANCE, OPERATION AND MANAGEMENT

LABORATORIES



MAINTENANCE, OPERATION AND MANAGEMENT LABORATORIES





TECHNICAL ASSISTANCE

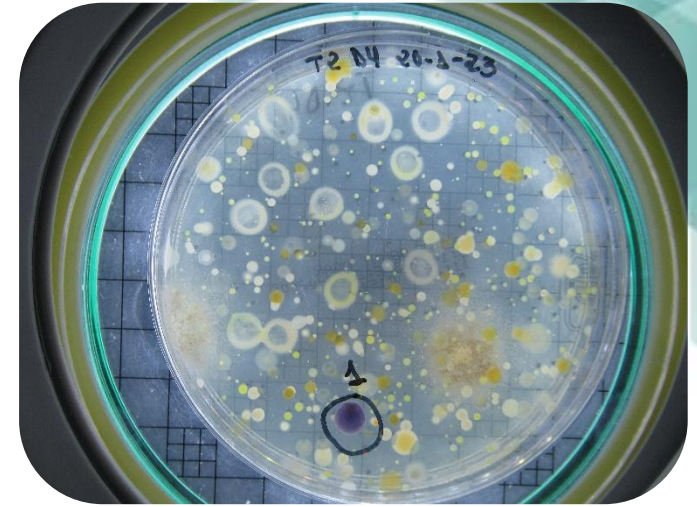


CONSTRUCTION MANAGEMENT



TESTS AND RESEARCH

- IN SITU CHEMICAL OXIDATION
IMPROVED EXTRACTION
WITH SURFACTANTS
S-ISCO
- BIORREMEDIATION:
 - BIOPILE
 - TECHNOSOIL
- INVESTIGATION OF
BACTERIAL CONSORTIA

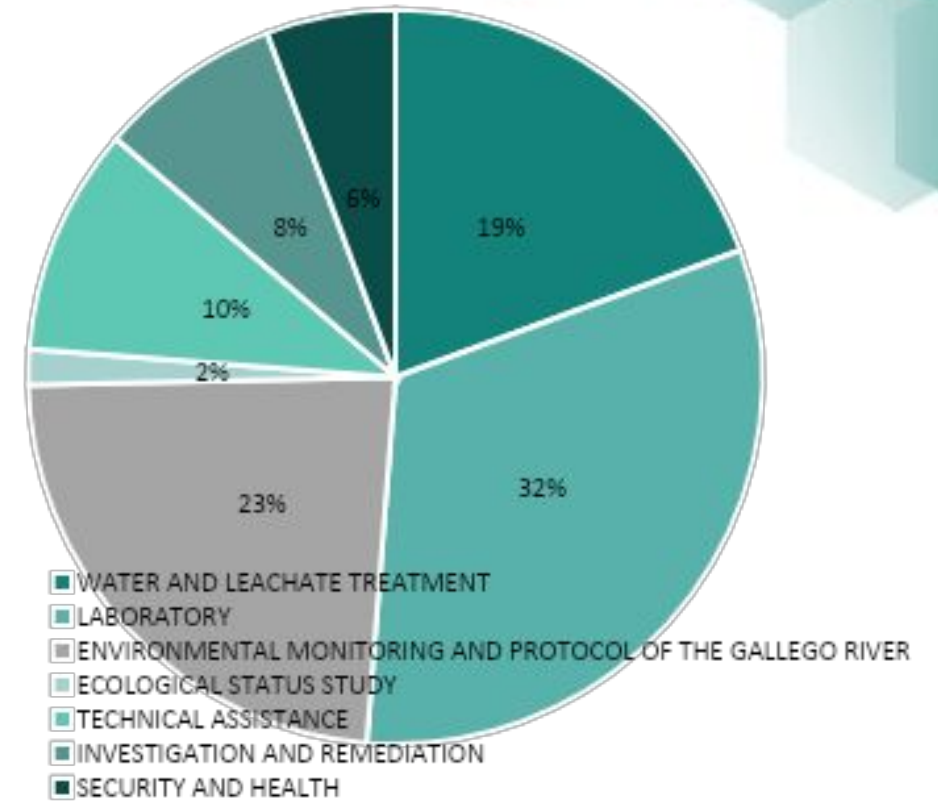
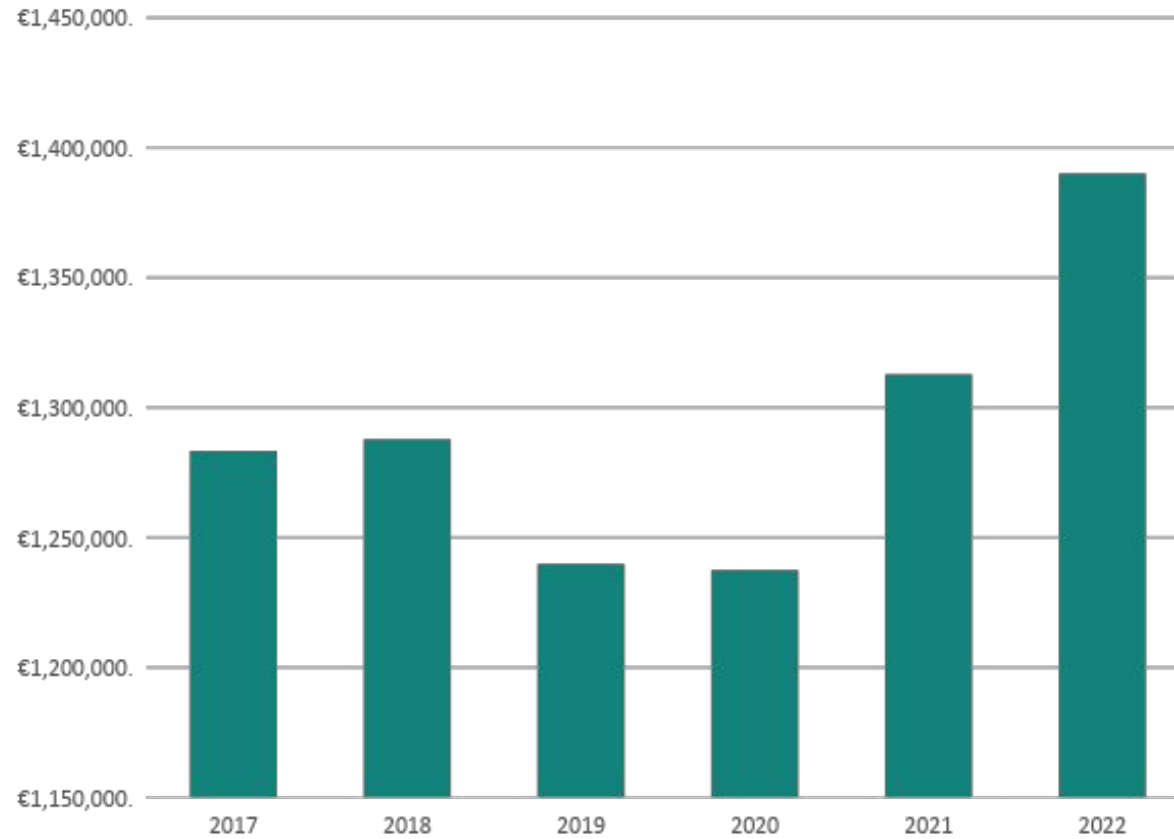


HEALTH AND SAFETY COORDINATION

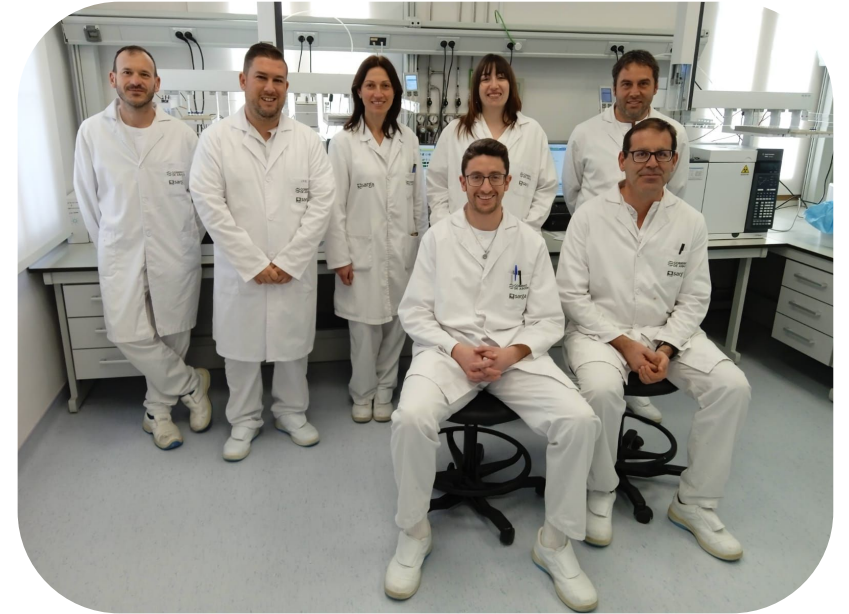
COORDINATION OF BUSINESS ACTIVITIES



ECONOMIC INVESTMENT



MULTIDISCIPLINARY TEAM



THANK YOU FOR YOUR ATTENTION

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