



NON TECHNICAL SUMMARY OF THE SOCOCIM KILN PROJECT ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT



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Part 1: Project overview

Project goals

The kiln 6 project is proposed to address 3 main goals:

■ Environmental performance

- Emissions far below existing units
- Low carbon cement produced with kiln 6 clinker thanks to best available technologies used
- Water usage reduction

■ Economical performance

- Better energetical consumptions compared to existing kilns
- Focus on quality leading to reduced clinker content in cement

■ Market growth

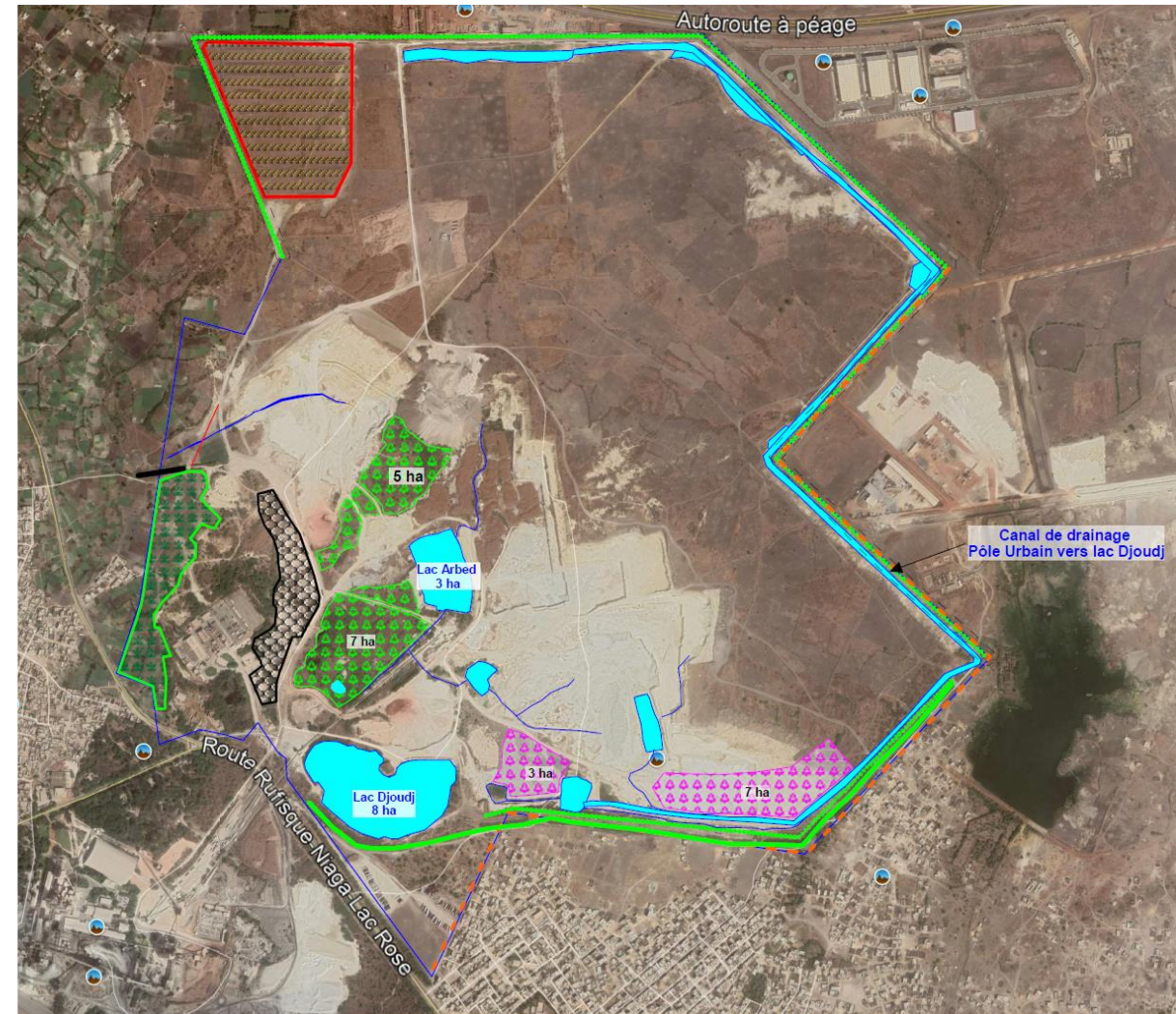
- Clinker imports stoppage
- Kiln 3 stoppage
- Globally +1,5 Mtpy clinker capacity increase



Environmental goals

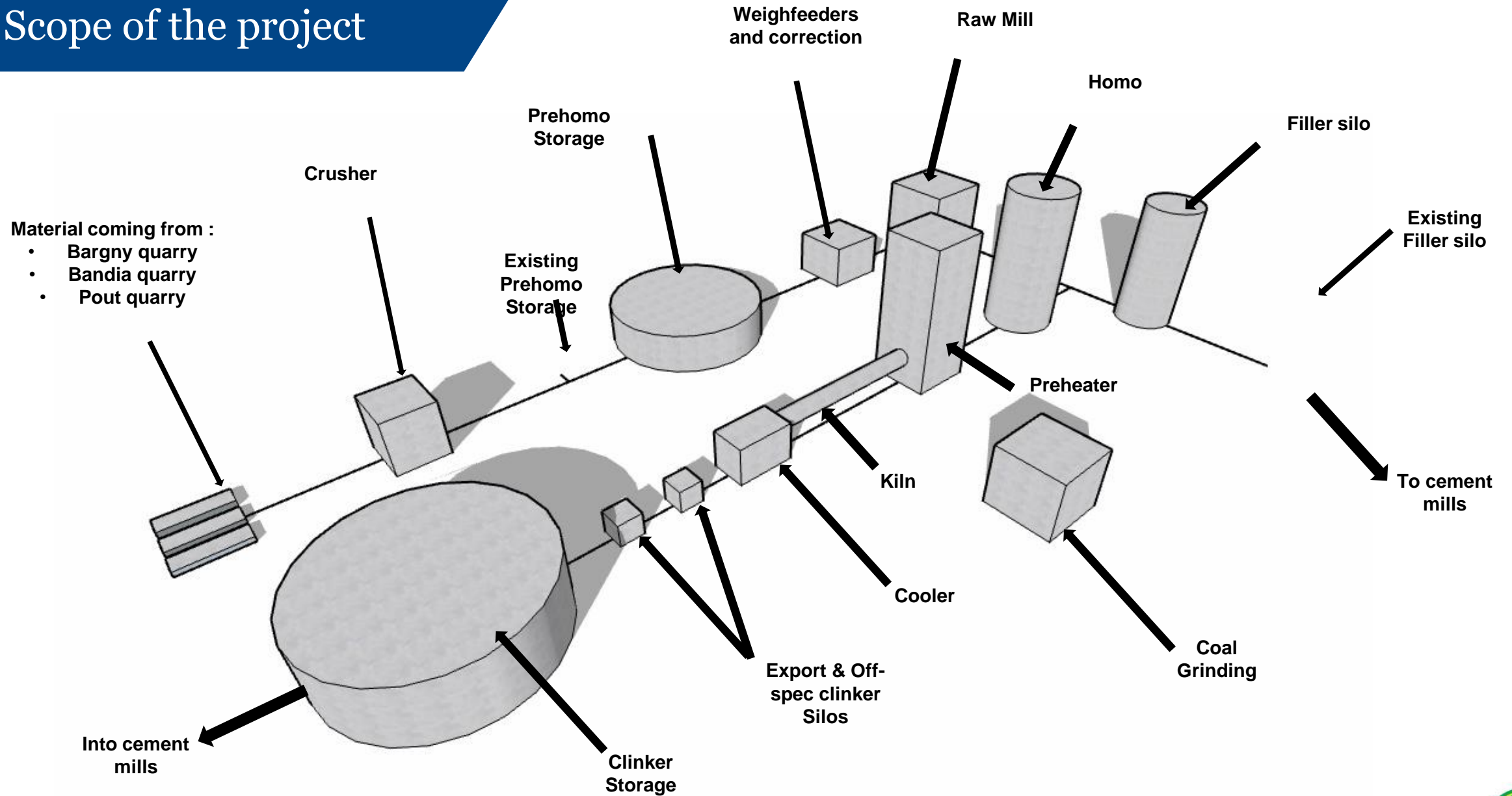
Water usage:

- Recuperation project in the quarry:
 - All rain water will be directed to the quarry lakes
 - Rain water treatment (filtration) for improved use in the plant
 - **Objective: reduce dependence on network water to 50% vs 82% today**
- Projected use in kiln 6 vs other kilns:
 - Kiln and raw mill design lead to better heat recuperation to dry material in the vertical mills
 - Average water consumption kiln 6 is reduced by half compared to kiln 5
 - **Economy of 150 000 m3 of water per year upon startup of kiln 6**



Légende			
	Zone Maraîchers		lac ou bassin
	Zone de reboisement		CPV
	Zone de reboisement 2021-2025		Canal de drainage PU
	Zone Garage		Barrage "Maraîchers"
	Drainage eau		Mur de clôture (3816 m)
	Merlon planté (6361 m)		Conduite Gaz
	Ceinture verte		Aire coques d'arachide
	Reboisement 2020		

Scope of the project



Scope of the project

- Quarry:
 - Hammer crusher wobbler ; 2 metallic feeders and civil works for a third one
 - Startup in December 2023 to feed kilns 3 4 5 and debug before kiln 6 startup
- Preblending and raw mix feeding
 - Circular preblending hall dedicated for kiln 6
- Raw mill
 - Vertical raw mill ; production collected by 2 cyclones + dedicated fan.
- Main bag filter
 - TGT bag filter: filtration of kiln, raw mill and cooler gases
 - Compressors room installed under the filter
- Kiln feeding
 - Homogenization silo 20 kT:
 - Weigh feeding hopper on preheater 1st stage
- Preheater
 - Preheater with in-line calciner, 5 stages, double string
 - AFR feeding belt
- Kiln and cooler
- Cooler gas treatment
 - dedusting cyclones and heat exchanger. All dust is ultimately treated at the main process filter.
- Vertical coal mill

Part 2: Regulatory requirements



❑ Senegalese Environment Code

- Article L48 of **Law n°2001-01 of January 15, 2001 on the Environment Code** provides that “Any development project or activity that may affect the environment, as well as policies, plans, programs, regional and sectoral studies, must undergo an Environmental and Social Assessment”
- **Decree n°2001-282 of April 12, 2001 implementing the Environmental Code:**
 - The obligation for any investment programme to make a prior environmental impact assessment
 - The environmental impact studies are carried out prior to any administrative authorisation required for the implementation of the planned activity



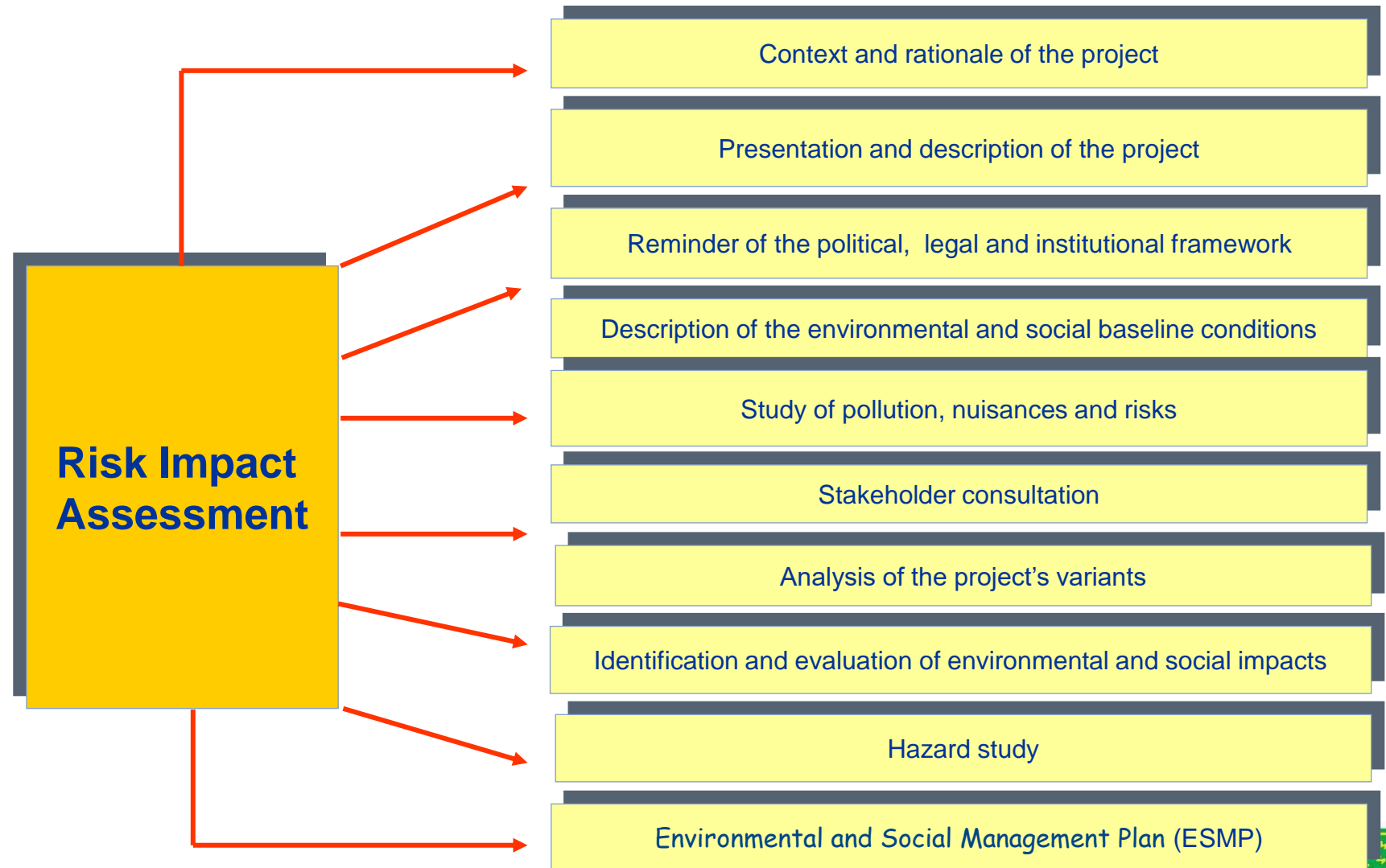
Part 2: ESIA preparation process

■ Elaboration of the Terms of Reference (ToR)

- Validation of the ToR by DEEC

■ Selection of the approved firm

- Tender procedure
- Selection of the approved firm: MAXEN



■ CONDUCT OF ESIA

Part 3: Summary of the ESIA content



Project background and rationale

■ New Kiln Project background

- Modernization of facilities
- Reduction of CO₂ and other greenhouse gas emissions
- Cost reduction

■ Project rationale

- Replacement of outdated kilns
- Use of alternative fuels up to 70% (which will significantly reduce the consumption of fossil fuels and the associated adverse effects on the environment)
- Sustainable environmental and social policy
- Maximum reduction of electricity consumption per ton of clinker
- Ensure the sustainability of SOCOCIM's activities in a growing market



☐ Positive impacts

- Increased production capacity to meet local and sub-regional demand
- Generation of tax revenues for the State and neighbouring communities, through payment of taxes and charges
- Business opportunities for local service providers and suppliers as well as small businesses in the vicinity of the plant
- Promotion of local employment
- Energy recovery from waste
- Reduction of fossil energy consumption
- Reduction of CO₂/greenhouse gas emissions
- An example of industrial ecology: Use of alternative fuels, wooded bunds, reforestation/carbon sequestration and retention of rainwater for reuse)

Summary of the environmental and social impact analysis

❑ Risk impact analysis as per the ESIA study:

- Low risk impact of the project on water resources, protected natural areas, flora and fauna
- The project is compatible with local economic activities and transportation accesses.
- Some risks have been identified relating to noise, air quality and traffic.
- Regarding air quality, no issue regarding:
 - PM 2.5
 - CO
 - Lead
 - Cadmium
 - Volatile Organic Compounds
 - Benzene
 - Formaldehyde
- Some issues were noted regarding PM10, Nox, Sox.

■ Current situation - Air quality monitoring

- Results of spot controls by Bureau Veritas on the stacks in 2019:

Pollutant	Measured stack	Result	Limit of emission	Legal reference	Compliance with standard limit
O ₂	Kiln 3	15,7	1 to 25% dry volume	NF EN 14789	For the 3 kilns, the average measures are in compliance with the French standard.
	Kiln 4	16,5			
	Kiln 5	12,4			
CO ₂	Kiln 3	7,38	1 to 25% dry volume	NF X20-380	For the 3 kilns, the average measures are in compliance with the French standard.
	Kiln 4	6,77			
	Kiln 5	14,3			
CO	Kiln 3	201	0 to 740mg/Nm ³	NF EN 15058	No measure above the French standard limit.
	Kiln 4	705			
	Kiln 5	111			
NO _x	Kiln 3	422	1300mg/m ³ , expressed in NO ₂ dry	NS-05-062	The average measures are below the Senegal standard limit.
	Kiln 4	239			
	Kiln 5	832			
Dust	Kiln 3	0,5	50mg/m ³	NS-05-062	The average measures are below the Senegal standard limit.
	Kiln 4	49,3			
	Kiln 5	0,5			
PCDD/PCDF	Kiln 3	0,0000345	0,1ng/m ³	NS-05-062	PCDD/PCDF emissions of kilns 3 and 4 are very low compared to the Senegal standard limit. For kiln 5, no measure could be made in 2019, but measures made in 2021 and 2022 were well below standard limits.
	Kiln 4	0,0000362			

■ Current situation

- SO2 and NO2 measures in the ESIA report:
 - For the SO2 measures (3 out of 8) which were above the limit, it is worth noting that the measure points are close to the roads (Route Nationale N°1 and Bargny Road), road traffic having an impact on SO2 concentration.
 - NO2 concentrations are very low compared to WHO and Senegalese standards. However, 2 measures near the Sococim raw material storage area were above the limit, which may be caused by a combination of factors (fish smoking operations, train and road traffic, etc...)
- PM 2.5 and PM 10 measures in the ESIA report:
 - All but one (near National Road 1) PM 2.5 concentrations measures are below the Senegal standard limits.
 - PM10 measures are higher and may be explained by internal and external traffic relating to transportation of bulk raw materials.

■ Current situation

• Actions against fugitive dust emissions

- Daily watering of roads and tracks in the plant, according to a schedule and in case of necessity
- Covering of all incoming trucks in the plant (clinker, coal, outside quarries)
- Green areas management: with an area of 118 672 m² within the plant limits
- Track concreting or replacement with a robust laterite + cement
- Speed limit of 20 km/h
- Reforesting in the quarry and around the quarry limits with the « Green belt »
- Awareness of truck drivers regarding the observance of the environmental requirements



■ New kiln impact :

■ **Guaranteed Nox and Sox emissions below applicable standards in Senegal:**

- Improvement compared to existing situation with voluntary continuous emissions monitoring systems for Nox and Sox at kiln 6 stack
- Main burner and calciner designed for low NOX emissions

■ **PM and other air pollutants below IFC guidelines:**

- PM < 10 mg/Nm³ (25 mg/Nm³ IFC)
- SO₂, linked with raw material pyritic sulfur content expected to be in line with existing performance : 156 mg/Nm³ maximum measured at kiln 3 (400 mg/Nm³ IFC)
- Dioxin and furans measured at maximum 0,07 ng TEQ/Nm³ on existing kilns

■ **Design significantly reduces dust emissions:**

- Corrective Marl production will be done at Bargny quarry site, reducing handling distance and fugitive dust in the plant
- No more clinker imports and reduced outside handling:
 - at Dakar port, at discharge in the plant, at usage in cement mills.
 - Inside clinker storage increasing from 60 kT to 180 kT (+200 %)

■ **CO₂:**

- Best possible energetic efficiency for both kWh/ton (vertical mills, efficient fans, VFD motors...) and kcal/ton (in line calciner, efficient cooler...)
- The project will achieve clinker specific emissions below 700 kgCO₂/t clinker with 70% AFR
- Globally, 300 kT CO₂ per year

will be avoided compared to present scenario

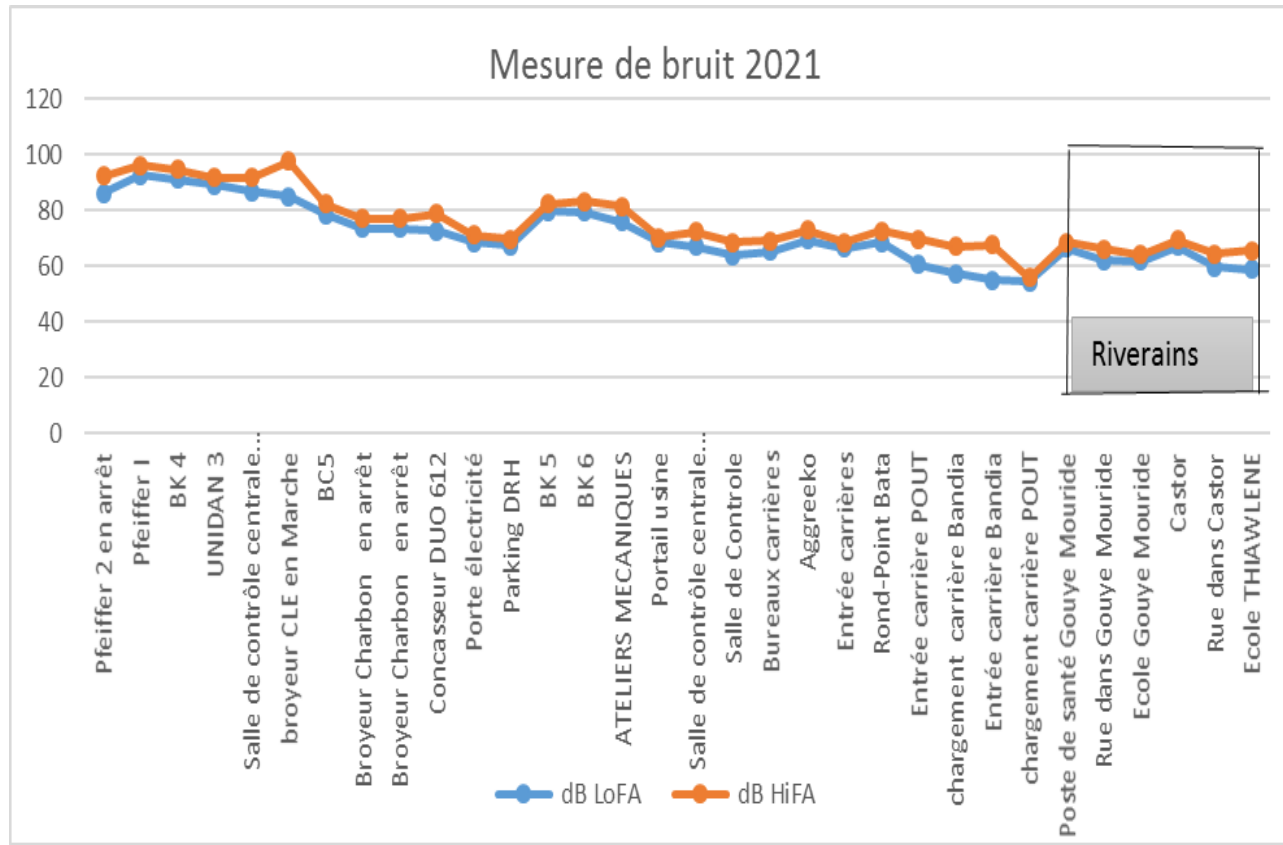
■ **Kiln 6 is designed to use at least 70% AFR (guaranteed value)**

■ **Alternative raw materials use is also made possible thanks to the addition of a reintroduction hopper in the quarry.**

■ **A new study has been contracted that will precisely calculate the air quality impact of the new kiln 6 and will include any potential mitigation measures.**

Results of the ESIA

- Noise measurement results



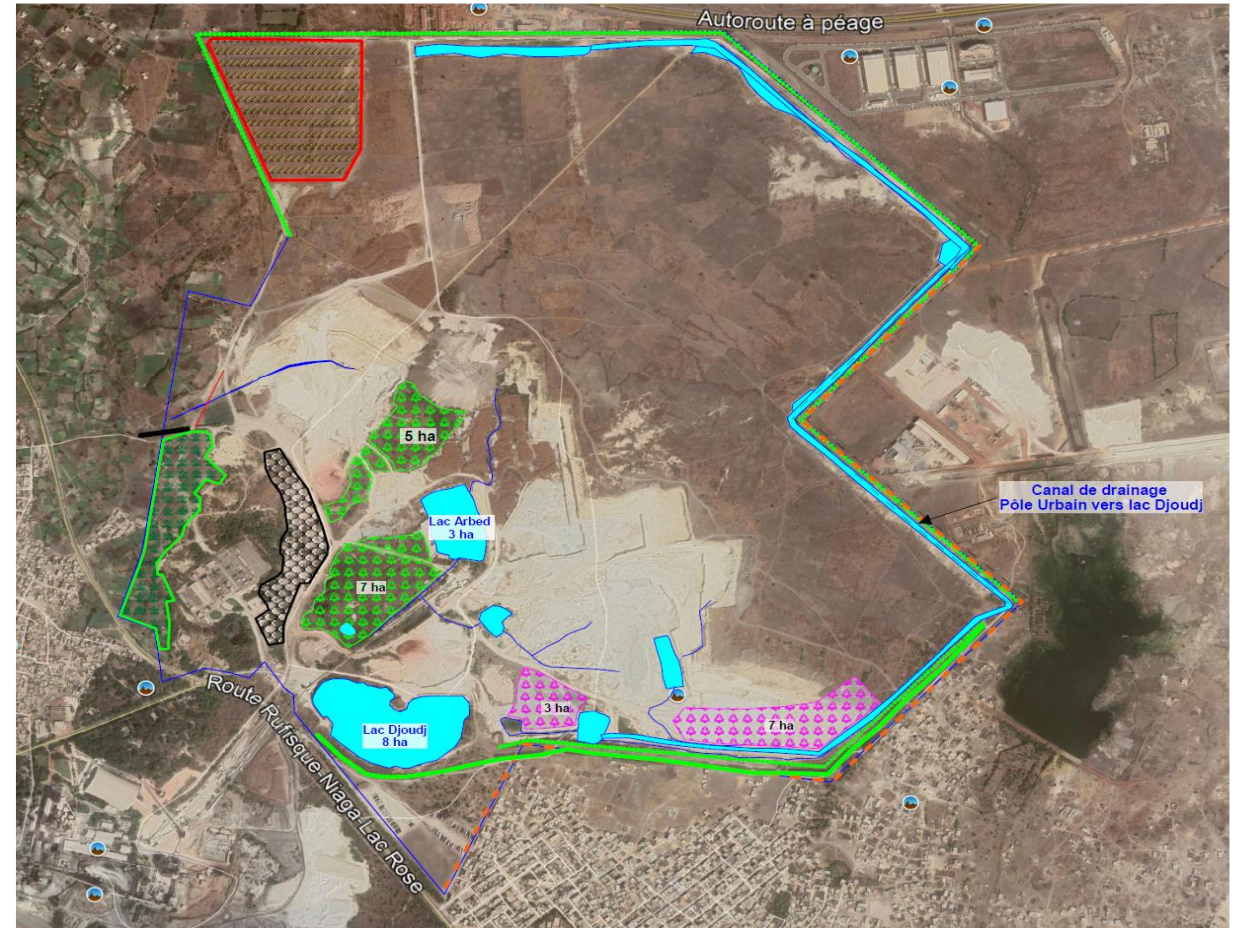
All values obtained at neighbor's locations are within the Senegalese noise standards. However, inside values shall be compared with the French Standard, as Senegalese standard is not adapted to our heavy process industry. It is expected that the standard will be revised soon. It is to be noted that in all areas where values are above 85 dB, individual or collective protection measures are in place.



Signs for mandatory ear protection in all noisy areas

Current situation

- Actions in quarry to reduce noise and vibrations
 - Evolution of explosive charge plan to go from mono-detonation to tri-detonation and quadri-detonation
 - Creation of buffer corridors in order to reduce vibration towards inhabited areas
 - Construction of a protective wall in addition to the green belt all around the Bargny quarry



Map of the Bargny quarry.

New situation with kiln 6

■ Stoppage of kiln 3

- Cooler fans not equipped with silencers presently
- Stoppage of CLE double ball mill

■ Stoppage of existing coal mill

- Ball mill replaced with vertical mill

■ Stoppage of existing Arbed and Duo crushers:

- Running in open environments, with proximity to plant and houses (500 meters away)

■ New Kiln impact on noise :

- All mills will be vertical
- All fans will be equipped with silencers, in particular at the cooler
- New crusher in enclosed building, in the quarry bottom, closest house = 800 m corresponding to 35dB
- **A new study has been contracted that will precisely calculate the noise impact of the new kiln 6 and will include any potential mitigation measures.**



■ Current situation

- Action to increase awareness of truck drivers
 - Truck controls by security agents at plant entrances
 - Safety meetings in order to remind the elementary rules, in particular: speed limit at 20 km/h, technical control trucks...
 - Movies shown about road safety
 - Awareness of transport companies about the respect of traffic regulation on site
 - Use of a safety protocol for loading and unloading of trucks

■ New kiln impact:

- Stoppage of kiln 3:
 - No clinker to be sent externally for cooling
 - Less raw material (est: 800 kT/year = 20000 trucks) and less clinker (est: 500 kT/year = 12500 trucks) to be handled.
- Stoppage of existing coal mill:
 - 200 kT of coal to be handled and ground on a new modern equipment
- **A new study has been contracted that will precisely calculate the traffic impact of the new kiln 6 and will include any potential mitigation measures.**

■ Actions:

- New road extension for cement delivery trucks' circuit
- Extension, reorganisation of parking lots
- Place traffic control agents at the entrance of the site



Environmental and Social Management Plan (ESMP)

■ Costs of the ESMP

- Cost overview for the Mitigation Plan, Monitoring Plan, and Capacity Building measures

Heading	Allocated amount (FCFA)
Mitigation costs	71,400,000
Costs of the follow-up plan	69,700,000
Costs of the monitoring plan	32,000,000
Costs of capacity building measures	107,837,000
TOTAL	280,937,000

Summary table of the ESMP budget

These ESMP costs have been included in the project budget



Part 4: Stakeholder engagement

Consultation with stakeholders

Stakeholders consulted

- 12 SOCOCIM Directorates and/or departments,
- 26 State's technical/administrative departments
- 04 health structures
- 04 Town councils
 - Town council of Rufisque
 - Town council of Bargny
 - Town council of Rufisque Est
 - Town council of Rufisque Nord
- 20 associations/organisations in Rufisque and Bargny

Results of the consultation

- Fears about air quality degradation and noise pollution
- Fears and concerns raised by the storage of alternative fuels, particularly groundnut shells due to their self-ignition propensity
- Risk of street congestion caused by trucks
- CSR approach of SOCOCIM



Illustrative example of a meeting



Validation of the ESIA and Issuance of the Environmental Clearance Certificate

■ Pre-validation of the report by the technical committee

- Report pre-validation meeting held on May 20, 2021 at Novotel Hotel, chaired by the deputy governor of Dakar in the presence of the technical services involved in the implementation of the project
- Integration of the Committee's recommendations
- Submission of the report



■ Public hearing

- Holding of the public hearing in SOCOCIM premises on November 26, 2021, chaired by the Mayor of the Commune of Rufisque Est in the presence of Representatives of the Town Halls of the City of Rufisque, the Communes of Rufisque Ouest and Bargny as well as women's and youth associations.
- Validation of the ESIA by the populations



Validation of the ESIA and Issuance of the Environmental Clearance Certificate

Final validation of the report

- Incorporation of the recommendations of the populations following the public hearing
- Final report submitted in five copies plus a digital version to the DEEC
- December 27, 2021: issuance of the environmental clearance certificate; January 10, 2022, issuance of the decree on the environmental compliance certificate of the project for the construction of a new low-carbon burning line, kiln 6.

REPUBLICQUE DU SENEGAL
Un Peuple - Un But - Une Foi

N° 004612 MEDD/DEEC/DA/DEIE.nfn
Dakar, le 27 DEC. 2021

MINISTRE DE L'ENVIRONNEMENT
ET DU DEVELOPPEMENT DURABLE

Le Ministre,

ATTESTATION

Le Comité technique s'est réuni le jeudi 20 mai 2021, à Dakar pour l'examen du rapport d'étude d'impact environnemental et social (EIES) du projet de construction d'une nouvelle ligne de clinker à bas carbone « projet four 6 », à Rufisque, par SOCOCIM INDUSTRIES SA.

Suite à cette rencontre, une séance d'audience publique s'est tenue, le vendredi 26 novembre 2021, à Rufisque.

Au terme de cette procédure et de la prise en compte des observations issues des rencontres citées précédemment dans le rapport final, j'atteste que le projet de **construction d'une nouvelle ligne à bas carbone « projet four 6 »**, à Rufisque, est conforme aux dispositions du Code de l'Environnement relatives aux études d'impact.

La présente attestation est délivrée à la **SOCOCIM INDUSTRIES SA** pour servir et valoir ce que de droit, en attendant la signature de l'arrêté ministériel portant certificat de conformité environnementale.

Toutefois, le démarrage du projet reste subordonné à l'obtention des autres autorisations administratives requises. Le démarrage des travaux doit être notifié à la Direction de l'Environnement et des Établissements classés qui se chargera de veiller à ce que les mesures prévues dans le plan de gestion environnementale et sociale (PGES) soient appliquées.

Le non-respect du PGES, contenu dans le rapport d'EIES validé, peut entraîner le retrait du certificat de conformité environnementale.

Pour le Ministre et par délégation
Le Directeur de Cabinet
Cheikh Ndiaye SYLLA

Ministère de l'Environnement et du Développement Durable
Parc Forestier et Zoologique de Hann - Route des Pères Maristes - Dakar/Sénégal
E-mail : medd@environnement.gouv.sn - Site web : www.environnement.gouv.sn

04 JAN. 2022-000097

REPUBLICQUE DU SENEGAL
Un Peuple - Un But - Une Foi

MINISTRE DE L'ENVIRONNEMENT
ET DU DEVELOPPEMENT DURABLE

ANALYSE : Arrêté portant certificat de conformité environnementale du projet de construction d'une nouvelle ligne de clinker à bas carbone « projet four 6 », à Rufisque, par SOCOCIM INDUSTRIES SA

LE MINISTRE,

VU la Constitution ;
VU la loi n° 2001-01 du 15 janvier 2001 portant Code de l'Environnement ;
VU le décret n° 2001-282 du 12 avril 2001 portant application du Code de l'environnement ;
VU le décret n° 2020-2098 du 01 novembre 2020 portant nomination des ministres et secrétaires d'Etat et fixant la composition du Gouvernement ;
VU le décret n° 2020-2100 du 01 novembre 2020 portant répartition des services de l'Etat et du contrôle des établissements publics, des sociétés nationales et des sociétés à participation publique entre la Présidence de la République, le Secrétariat général du Gouvernement et les Ministères ;
VU le décret n° 2020-2214 du 11 novembre 2020 relatif aux attributions du Ministre de l'Environnement et du Développement durable ;
VU l'arrêté n° 9468 du 28 novembre 2001 portant réglementation de la participation du public à l'étude d'impact environnemental ;
VU l'arrêté n° 9469 du 28 novembre 2001 portant organisation et fonctionnement du Comité technique ;
VU l'arrêté n° 9470 du 28 novembre 2001 fixant les conditions de délivrance de l'agrément pour l'exercice des activités relatives aux études d'impact sur l'environnement ;
VU l'arrêté n° 9471 du 28 novembre 2001 portant contenu des termes de référence des études d'impacts sur l'environnement ;
VU l'arrêté n° 9472 du 28 novembre 2001 portant contenu du rapport de l'étude d'impact sur l'environnement ;
VU les rapports de pré-validation, par le Comité technique de l'étude d'impact environnemental et social du projet de construction d'une nouvelle ligne de clinker à bas carbone « projet four 6 », à Rufisque, le jeudi 20 mai 2021, à Dakar et de l'audience publique tenue le vendredi 26 novembre 2021, à Rufisque.

Sur la présentation du Directeur de l'Environnement et des Etablissements classés.

SOCOCIM Industries



Appendix

Actions carried out

On-going or planned actions

Number	Findings/Risks	Actions/Mitigation measures	Follow-up indicators	Documents existing or to be created	Start date	Progress	Actual end date
1	Nuisance of SOCOCIM on habitats, species (biodiversity)	Inform and educate employees about the company's environmental commitments and the preservation of wildlife and natural habitats.	Percentage of people sensitized	Commitment of the General Management, Environmental Management Programme		SOCOCIM regularly carries out internal audits, tracks down environmental anomalies and conducts ISO 14001 certification audits to ascertain the site's compliance and put in place improvement measures,	
		tree cutting permit (logging permit)	Number of non-compliances following unauthorized tree cutting	Internally delivered cutting permit (to be used by the requesting departments)	2021	For projects requiring tree cutting, a request for authorization is systematically sent to the Rufisque Water and Forestry Department.	August 2022
		Reforestation around the associated infrastructure	Area reforested	Monitoring file		All projects include the greening component. A rehabilitation plan is also in place..	

Actions carried out

On-going or planned actions

Number	Findings/Risks	Actions/Mitigation measures	Follow-up indicators	Documents existing or to be created	Start date	Progress	Actual end date
2	Air pollution and CO2 emissions	Installation of bag filters and continuous measurements of stack dust and gas emissions plus annual control by an approved body	Stack emission concentrations	Atmospheric emissions procedure (B Procedure ENV.P01), Air quality monitoring instruction Env.I03 and Atmospheric emissions monitoring register Env.I06.02			
		Paving of tracks, creation of green spaces and reforestation	Surface area developed Area reforested				
		Watering of tracks	Frequency of watering	Track watering programme			
		Truck sheeting	Percentage of sheeted trucks			All trucks coming from outside are sheeted	
		Increase of the biomass share in the energy mix to over 50%.	Biomass substitution rate			The current substitution rate varies between 20 and 25%. The long-term objective is to reach 100% with the start-up of kiln 6. Various sourcing development projects are underway	
		Optimization of the clinker content of the cement (material substitution)	Percentage of clinker in the cement			2021	SOCOCIM has put in place a climate action plan for 2021-2030
	Production of carbon-free electricity (solar plant, gas turbine)				2022		2030

Actions carried out

On-gong or planned actions

Number	Findings/Risks	Actions/Mitigation measures	Follow-up indicators	Documents existing or to be created	Start date	Progress	Actual end date	Effectiveness
3	Water pollution (wastewater discharges)	Raising staff awareness on good environmental practices (Minutes dedicated to Environmental awareness)	Percentage of people sensitized					
		Separation of process water from wastewater and rainwater to reduce pollution risks and improve the quality of discharge water	TSM, COD, BOD5 and Nitrogen concentration	Cement plant water management procedure (B Procedure ENV.P04), Water analysis follow-up table (Env/PO.04.01), Water consumption follow-up table (Env/PO.04.02), Cooling circuit instruction (Env/PO.04.I01)	2021		February 2022	Compliance of water discharges after this work
4	Risk of soil pollution (accidental hydrocarbon spills, poor waste management)	Raising staff awareness on good environmental practices	Percentage of people sensitized	Waste management procedure (B Procedure ENV.P06), Waste approval Form (ENV/P06/01) - Waste monitoring register (ENV/P06/02 and ENV/P06/03) - Waste inventory (environmental analysis) and Good Environmental Practises booklet, awareness-raising spots				

N°	Findings/Risks	Actions/Mitigation measures	Follow-up indicators	Documents existing or to be created	Start date	Progress	Actual end date
5	Noise pollution (noise and vibration)	Provision of noise equipment to workers					
		Signs indicating mandatory earing protections in noisy areas	Noise levels in dB	Noise emission monitoring procedures (B Procedure ENV.P07)			
		Insulation/containment of noise generating equipment (compressors, crusher...)					
		Reduce the instantaneous unit load Create a buffer zone between the houses and the fronts	Number of values above the threshold				
6	Risks of road accidents	Sensitize the Plant's drivers and personnel on compliance with traffic rules and the 20km/h speed limit in the factory	Number of people sensitized				
		Equip drivers with and train them on the use of first aid kits			June-22		
		Position traffic control officers	2 security guards posted at the entrance of the plant to regulate traffic during peak hours				
		Finalize the plant's traffic plan			March-22		
		Sensitize carriers on the risks of accidents	Number of road accidents		Continuously		
		Work with health structures for emergency management	Follow the mechanisms in place Infirmary inside the plant for first aid and firemen				
		Loading and unloading protocol with transporters	Number of transporters with loading/unloading protocol	Procedure SECU.PO.01.CDC02			

Actions carried out

On-going or planned actions

Number	Findings/Risks	Actions/Mitigation measures	Follow-up indicators	Documents existing or to be created	Start date	Progress	Actual end date
7	Increased road traffic	Control of drivers entitlement (driving license, CACES...)					
		Place traffic control agents at the entrance of the site	2 security guards positioned at the entrance of the plant to regulate traffic during peak hours				
		New road extension for cement delivery trucks' circuit					
		Extension, reorganisation of parking lots			2021	As part of the project of installation of the second truck parking, 2 lavatories have been constructed, with a 24/24 cleaning system. The sanitary facilities of the old parking lot have also been rehabilitated.	
8	Risks of chronic diseases (respiratory diseases...)	Periodic medical check-ups	Percentage of occupational diseases	Monthly monitoring file			
		Provision of Personal Protective Equipment adapted to the workers					
		Installation of Collective Protective Equipment (central vacuum system...)					

Actions carried out

On-going or planned actions

Number	Findings/Risks	Actions/Mitigation measures	Follow-up indicators	Documents existing or to be created	Start date	Progress	Actual end date
9	Risk of fuel fires	Staff training on fire safety	Number of people sensitized				
		Posting of no-smoking signs in ATEX zones					
		Safety audit of fuel stocks (verification of compliance with storage instructions, compliance of equipment in ATEX zones, compliance with distances between piles, etc.)	Number of fuel fires				
		Update of the Internal Operation Plan (IOP)	Number of exercises carried out/year		Feb-22	<p>SOCOCIM fire network is tested weekly. The extension of the network is also included in the work on kiln 6.</p> <p>Exercise with the fire intervention service provider every two weeks</p> <p>The fire and emerging risks Expert of Vicat Group also brings his expertise to SOCOCIM</p>	Dec-22



Actions carried out

On-going or planned actions

Number	Findings/Risks	Actions/Mitigation measures	Follow-up indicators	Documents existing or to be created	Start date	Progress	Actual end date
10	Risk of work accidents	Building staff awareness of occupational hazards	Number of work accidents, frequency rate and severity rate				
		Establishment of Minutes dedicated to Safety in workshops and construction sites	Number of safety minutes conducted				
		Welcoming external companies	Number of subcontractors present on site	Safety charter, Subcontractor safety commitment (HSE charter), PGSEE (water safety plan, WSP)			
		HSE induction of new employee		Welcoming booklet			
				HSE induction procedure	June-22		
		Tracking down anomalies/conducting safety audits	Anomaly correction rate	Audit check-list			
		Introduction of work permits		Work permits (excavation permit, fire permit, work at height permit, etc.)			
		Securing and signalling risk areas					



Actions carried out

On-going or planned actions

Number	Findings/Risks	Actions/Mitigation measures	Follow-up indicators	Documents existing or to be created	Start date	Progress	Actual end date
11	Land risks	Identify and materialize the limits of our perimeters			March-22	1,100 km of the wall still to be built on the quarry side and about 300 on the Bargny side	Jul-22
12	Complaints and grievances	Set up a complaint mechanism	Number of complaints recorded	Complaints registration form	2018	Established for over 5 years now	
13	High expectations in relation to the CSR approach	A better formalization of our CSR approach (in action for many years with significant results for local populations) is underway. A materiality matrix has been established to improve the identification and targeting of the needs of local populations. An action plan has been established following this step.	Number of meetings with stakeholders / Progress of action plan	Meeting minutes and action plan follow-up	2020	Currently being implemented	
14	No recruitment of the local population	A database of jobseekers in Rufisque is available for the construction of kiln 6.	Number of people recruited locally (70% of permanent staff are from Rufisque and Bargny)		Permanent		Permanent
15	Risk of spreading of COVID-19	Establishment of a committee composed of HR, DQSE, Medical, and DSMIC staff representatives	Number of cases detected	Follow-up file	March-20	Ongoing	

