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| Inauguration of SUEZ's Seac Pai Van Water | | | | | | | | | | | | | | |
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| Treatment Plant in Macao | | | | | | | | | | | | | | |
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SUEZ Scope

| Chongqing Changshou Chemical Industry Park | |
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| WWTP pre-treatment project completed | |
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Innovation

| SUEZ Asia Innovation Trophy 2021 results | | |
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We Care

| Developing energy-saving and low carbon emission | |
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| projects to contribute to China's 'Carbon Peak and | |
| Carbon Neutrality' targets | |
| | |



Staff Land

| SUEZ organises 'Passion for the Environment' | |
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| fresco workshops | |
| | 23 |



H&S

Inauguration of SUEZ's Seac Pai Van Water Treatment Plant in Macao

On 30 November 2021, Macao Water, a SUEZ subsidiary, officially commissioned the newly completed Seac Pai Van Water Treatment Plant. The new facility will increase Macao Water's total daily water supply capacity from the current 390,000 m³ to 520,000 m³, a level sufficient to meet Macao's growing water demand for the next decade. The project represents a new chapter in Macao's water supply industry. Under the witness of more than 100 quests, including important officials from the central government agency, Zhuhai and Macao government departments, the Seac Pai Van Water Treatment Plant in Macao was inaugurated and officially put into operation.



Uses a 'green plant' concept

By adopting natural lighting and ventilation and by blending it with the landscape of the Seac Pai Van reservoir.



Uses SUEZ's patented technologies

Pulsatube®, Pulsazur® and Aquazur-V filtration water treatment technologies to remove organic matter and micro-pollutants.



Deploys energy-saving and low-emission solutions

Including solar-powered street lights, an efficient pumping system and reclaimed water reuse solutions.









Introducing 'Green Building' concept to reduce carbon footprint

SUEZ has been a part of the Macao's community for over 30 years. The commission of the Seac Pai Van water treatment plant is a new milestone in its water supply business in the city. It is the first of its kind in Macao to be awarded the 'One-Star' Green Building Design Label. Not only has this new plant achieved a more compact footprint and lower energy profile through energy-saving and water reuse solutions, it has also significantly improved Macao's entire water supply situation.











SUEZ wins various equipment supply and technical services contracts

In the last quarter of 2021, SUEZ won 5 contracts to supply equipment and technical services to wastewater treatment plants in China.



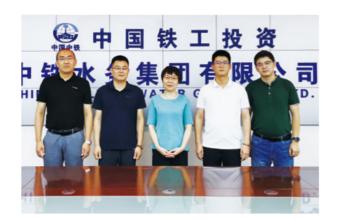
Shaowu, Fujian Province **Innovating wastewater** treatment equipment to improve treatment efficiency

SUEZ provides Densadeg[™] and Oxyblue[®] equipment supply and technical services for tertiary treatment processing in the 10,000m³/day Shaowu Jintang Industrial Wastewater Treatment Plant. This ensures that the effluent meets discharge standards and impact on the local water environment can be minimised. SUEZ adopts its first ozone dosing system, a combination of the ozone radial diffuser and hydro ejector, which was invented by the project team to solve the clogging problem that traditional ozone diffusers encounter. SUEZ will manage and operate the plant afterwards.



Hefei, Anhui Province Key project to protect and restore Chao Lake Ecological **Demonstration Zone**

SUEZ provides Densadeg[™] equipment supply and technical services to the 80,000m³/day wastewater treatment plant to ensure the effluent meets discharge standards as well as to protect the local water environment.



Xi'an, Shaanxi Province

Providing sludge treatment services to 23 WWTPs in Xi'an through waste-to-resource approach

SUEZ provides a dewatered sludge receiving system, a steam saturation system, a sludge drying system and an electrical control system to five dual-stage production lines so as to ensure low energy consumption and a high dewatering rate.



Suzhou, Jiangsu Province

Ensuring the effluent meets discharge standards to protect the water environment in Tai Lake

SUEZ will supply Densadeg[™] and Oxyblue[®] process equipment and technical services for the tertiary treatment line of the Suzhou Fenhu High-Tech Industrial Development Zone Industrial Wastewater Treatment Plant. The treated water quality will meet discharge standards to protect the water environment around Tai Lake. The project is designed with a treatment capacity of 10,000m³/day.



Pengyang, Ningxia Hui Autonomous Region Innovative practices for small municipal wastewater treatment plants

SUEZ provides integrated Densadeg XRC[™] equipment supply for the Pengyang County Wastewater Treatment Plant in Ningxia Hui Autonomous Region. The machinery improves settling tank performance and ensures that effluent complies with Class IV Surface Water Environmental Quality Standard.

Chongqing Changshou Chemical Industry Park WWTP pre-treatment project completed

Chongging Changshou Sino French, SUEZ's joint venture, completed its wastewater pre-treatment facility construction project in Chongging Changshou Chemical Industry Park and passed the acceptance check on 24 August 2021. The 30,000m³/day pre-treatment facility can improve wastewater treatment performance by adjusting the wastewater influent and monitoring the wastewater quality. It also serves as an emergency reservoir that enhances the plant capacity in managing emergencies. Currently, the JV is built with an industrial wastewater treatment capacity of 40,000m³/day and 240,000m³/day for drinking water and industrial water services respectively.



Chongqing Changshou JV Pre-Treatment Capacity





Chongzhou Sino French and Chengdu Sino French complete WWTP upgrading projects

Chongzhou Sino French and Chengdu Sino French, both joint ventures of SUEZ, completed their wastewater treatment plant upgrading projects in 2021. The two projects included new treatment processes of SUEZ Densadeg[™] and Biofilter for carbon removal to improve the quality of effluent which meets Class IV Surface Water Standard. It helps improve the local water environment. Currently, the treatment capacity of Chongzhou Sino French and Chengdu Sino French is 39,600m³/day and 19,800m³/day respectively.

39,600 m³ / day

Chongzhou JV **Treatment Capacity**

19,800 m³ / day

Chengdu JV **Treatment Capacity**

SUF7 collaborates with Thai companies on sustainable plastic waste management

SUEZ Circular Polymer Plant is collaborating with CP-All, the founder of 7-Eleven stores in Thailand, as well as SCG to promote sustainable plastic waste management practices. According to the contract signed in November 2021, SUEZ will provide high quality, Global Recycled Standard (GRS) certified post-consumer recycled resins of up to 500 tonnes a year as raw material for the manufacturing of 7-Eleven plastic bags. The goal of SUEZ Circular Polymer Plant is to activate a circular model for its clients and the local community so as to help contribute to Thailand's sustainable tomorrow.





SUF7 Dinzhou hazardous waste treatment project commences operations

On 19 August 2021, SUEZ and Shanghai Huayi Group carried out an ignition ceremony for the hazardous waste treatment project in the Qinzhou Port Economic and Technological Development Zone. The plant started to treat its first batch of waste on 24 August.

30,000 tonnes / year

Treatment Capacity

RMB 345m

Total Investment

SUF7 receives Comité France Chine Innovation Award for the third time



On 29 November 2021, SUEZ, Shenghong Group and Sinopec Guangzhou Engineering received the Comité France Chine (CFC) 2021 'Innovative Initiative Award' for their green solution for ultra-low petrochemical wastewater discharge. The award-winning solution, with its outstanding performance in social, economic, industrial and environmental benefits, fully reflects SUEZ's commitment to realising resource utilisation, environmental protection and conservation of biodiversity through innovative technology.



Being repeatedly affirmed of its innovation DNA, SUEZ is proud to provide innovative green solutions for wastewater treatment to one of China's biggest petrochemical projects in Lianyun Port.



84% highest wastewater reuse rate among all petrochemical projects in China







SUEZ wins GBA Trophy





At the Sino-French GBA Business Summit held on 21 October 2021 in Guangzhou, SUEZ won the Greater Bay Area Trophy from the CCI France Chine. The recognition affirms the outstanding performance of SUEZ's smart and innovative technologies applied in industrial wastewater treatment services that facilitate wastewater recycling as well as promote social and environmental sustainability for the region's development. At the summit, Felix Fan, Senior Vice President of SUEZ Asia. shared SUEZ's strengths in developing business, investment and innovation as a French-invested enterprise in China.

SUEZ's commitment to the International Advisory Committee of Chongqing & Chengdu



Chongqing Mayor's International Economic Advisory Council Meeting 23-28/09/2021 Chongging

As an advisory member of the Chongging Mayor's International Economic Advisory Council Annual Meeting for 16 consecutive years, SUEZ was honoured to join this year's meeting to contribute ideas on its developments and prosperity. Over the past 20 years, SUEZ's environmental investments in Chongging and Chengdu have made many social achievements. In the next 5 years, SUEZ plans to continue to increase its investment in ecological restoration, energy conservation and carbon reduction projects in the Chengdu-Chongging Economic Circle and the Yangtze River Economic Belt so as to facilitate China's green transformation.



Chengdu's International Advisory Committee Annual Meeting 09/12/2021 Chengdu

As one of the members of the International Advisory Committee of Chengdu Municipal People's Government, SUEZ proposed sustainable suggestions on how Chengdu city can further take the lead in exploring the path of high-quality development, featuring priorities of ecology and environment as well as green and low-carbon development during the meeting this year.

SUEZ takes part in Green Expos to promote sustainable development

RETHINK HK Expo 5-6/10/2021 Hong Kong

RETHINK HK is one of Hong Kong's most influential business events for sustainability. Stephane Heddesheimer, CEO of Recycling & Recovery, and Francois Fevrier, CEO of Water, both from SUEZ Asia, shared the Group's sustainability strategies and contributions to the global circular economy agenda with other likeminded stakeholders. Sustainable development calls for concerted efforts from everyone including partnerships and collaborations among the governments, enterprises and the general public. Together, we continue to press on towards the vision of carbon neutrality.





Evolution of China Urban Water Environment & Ecology Conference27-29/09/2021 Changchun

SUEZ experts shared their insightful experiences and expertise with the audience during the conference on how to use sustainable water management system and innovative digital technologies to realise the potentials, values and opportunities for a low carbon future.







Eco Expo Asia 27-30/10/2021 Hong Kong

Clients, partners and industry peers of SUEZ as well as inspiring local students visited the Group's booth at the Expo to learn about its 100% sustainable solutions. Since its presence in Hong Kong in 1987, SUEZ has been proud to make longstanding contributions to the region's sustainability and circular economy. Our determination to help the region in its transition towards new and fully decarbonised models remains unswerving.











Sino-French Forum on **Green and Sustainable Business Development** 17/10/2021 Guangzhou

SUEZ shared its 100% sustainable, nature-based solutions at the Sino-French Forum on Green and Sustainable Business Development in the Pearl River Delta Region at the grand opening of the Sino-French Environment Month 2021. Over 20 enterprises, associations and research institutions gathered at the Guangdong Science Centre for a cross-sectoral exchange on sustainability and environmental protection issues.

Shanghai Chemical Industry Park **Environment Seminar 2021**

Shanghai Chemical Industry Park Environment Seminar 2021 was held on 11 November. Over 5,000 online attendees and 100 industries experts attended the conference. Around 20 speakers delivered speeches during the seminar on topics ranging from environmental protection for industrial parks, smart waste management, digitalised and precision management of wastewater treatment plants, to environmental protection laws and regulations as well as policies about carbon neutrality and more. This year marks the 15th anniversary of the R&D centre in SCIP, a wonderful facility to help our industrial clients prepare for the challenges ahead and to better serve the green development agenda of SCIP, SUEZ and all our clients.















Zhu Bin Deputy Director of SCIP Administrative Committee

Zhu Bin, who presented the opening keynote at the seminar, stressed SCIP's commitment to low carbon emission. and green development so as to strive to be a world-class petrochemical park and a demonstration project of circular economy, to help achieve the national goal of carbon peak and carbon neutrality.



Steve Clark CEO of SUEZ Asia

Steve joined the meeting online and delivered the opening speech, stating that SUEZ would reinforce its positioning as the preferred choice for clients by means of innovation. He hoped SCIP Water Research Centre and SCIP Waste Services Centre would drive the transformation of research results into productivity so as to improve the operational performance of joint ventures and to serve the Park better.



Technical improvement for SUF7 Performance Operational **Transformation** (SPOT) in China

To support SUEZ in achieving performance operational transformation target in China for 2023, four professional pillars are identified and measurable targets at different stages are set up to improve the operational performance of the four pillars by means of technical improvement and precision management. The four pillars are: energy and chemicals, burst reduction, maintenance optimisation, and workforce management. During execution, Power BI, a data analytics tool, is used to review project progress and results, track key indicators, evaluate and optimise the solutions before execution.



2020 - 2021Q3 Saved cost

2020 - 2023 Target to save

€ 1.5M

€ 1.06M

Tanggu Sino French uses the smart dosing system which has helped the JV reduce chemical consumption by 20-30% when compared with the same period in 2019.

SCIP Sino French optimises the combination of pumps which has helped save 25% electricity consumption.



2020 - 202103 2020 - 2023 Saved cost Target to save € 30.000 € 220,000

Chongging Sino French Tangjiatuo fully makes use of the parts in the unused DN600 air flow meters to replace the ones in the damaged DN400 air flow meters. It saves the expenses for purchasing new DN400 air flow meters.

Jiangsu Sino French uses the screw pumps to deliver sludge instead of the frequently damaged screw conveyor and saves maintenance cost.



2020 - 2021Q3

2020 - 2023

Saved cost € 200.000 Target to save € 280.000

To reinforce precision management,

SCIP Sino French has just launched a water network maintenance workforce management system to improve the tasks distributed to workers and review their follow-up action. In the future, the JV will make use of the data analysis to further improve the workforce management.

Macao Water adopts real-time monitoring for the newly built Seac Pai Van Water Treatment Plant so no extra manpower is needed on site, thus saving labour cost.



2020 - 2021Q3 2020 - 2023

Saved cost Target to save £ 2.25M € 0.83M

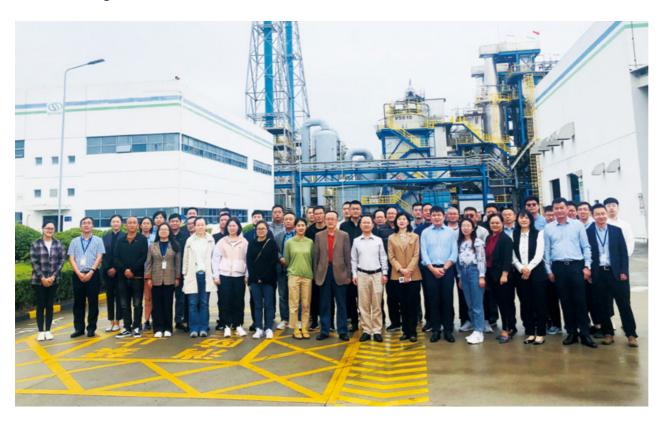
Sanya Sino French's NRW rate has been improved from 19.4% in 2019 to 16.9% in October 2021 by adjusting the water supply pressure in the network, replacing the expired water meters and selecting the proper water meters.

Chongqing Sino French's NRW rate has been improved from 15.4% in 2019 to 14% in October 2021, by reinforcing the leakage detection, reducing the visible-invisible ratio, replacing expired meters and intensifying inspection of illegal water use, etc.

Macao Water's NRW rate has been improved from 7.8% in 2019 to 6.8% in October 2021, by exploring new technologies to improve the leakage detection and the accuracy of the water meters.

Nation-wide hazardous waste management technical exchanges in SCIP

On 12-14 October 2021, SUEZ jointly organised a 3-day technical exchange session with the Solid Waste and Chemicals Centre under the Ministry of Ecology and Environment of the People's Republic of China, as part of the commonweal cooperative agreement since 2014. Over 30 government officials gathered at the SUEZ operation site in the Shanghai Chemical Industrial Park for an eventful time of knowledge and experience, sharing on safe, sustainable hazardous waste treatment and management practices.



SUEZ Laboratory Information Management System (LIMS) 2.0

As early as 2005, some of SUEZ's water testing laboratories in China started to use the Laboratory Information Management System (LIMS). In 2021, SUEZ Asia's water experts upgraded the system and launched LIMS 2.0 to improve the performance of laboratories. With the new features, users can access the system via web page or smart phone, which also comes with large data storage capacity. The use of firewall technology helps to protect data security. Currently, 14 of SUEZ's joint ventures' laboratories in China are using LIMS 2.0, which will be applied to anther 9 laboratories in 2022.

a user-friendly and data-safe system significantly improves the performance of SUEZ's laboratories





The three innovations are 'An Automatic Evaporative Crystalliser's Heating Structure for Water Sample', 'An Automatic Evaporation Device for Water Sample' and 'A Corrosion-Resistant Infrared Drying Box'. Jiangsu Sino French Water developed the products to reduce the risks of sampling radioactive objects so as to protect the health and safety of its staff as well as to cut operational costs.





Tanzhou Water

obtains satisfactory results in microbial water test

Tanzhou Water's laboratory had been awarded a certificate of honour for its satisfactory performance in the 'NSI Microbial Water Proficiency Test 2021' organised by IDEXX Laboratories, an American company, which saw a participation of 194 enterprises from 26 provinces and cities.



wins the second prize in the Chongqing SME **Innovation and Entrepreneurship Contest**

The Aquagile® SACS Inspulse and Precision Aeration Intelligent Control System developed by the JV outperformed 432 competitors and won the second prize in the Chongging SME Innovation and Entrepreneurship Contest.



Chongqing Sino French Water

wins Chongging Water Group's outstanding project award for precision management

The wireless thermometry system improved by young staff of the JV won the outstanding project award for precision management, which aims to improve the professional skills of young staff and enhance their dedication to work.



Jiangsu

On 21 October 2021, Jin Jianfeng, Changshu CPPCC Deputy Chairman, led a delegation to inspect the Yangtze River Emergency Reservoir. Jiangsu Sino French representatives gave the visitors an overview of reservoir operation, water quality, safety management and process improvement.



Xi'an

A delegation from Xi'an University of Architecture and Technology visited Xi'an CIAB Sino French.
Representatives from the university exchanged with the JV staff on the possibility of setting up an education base to facilitate technical exchanges among enterprises, universities and research centres.



SUEZ Technical Management & Development Department in China

On 13-14 October 2021, water experts from SUEZ China organised a facility maintenance technology sharing session in Qingdao Sino French Hairun to share advanced technology and management experience as well as to learn more about new products and know-how.



Qingdao

On 3 November 2021, a safety inspection team from Shangdong Province, accompanied by Zhou Weidong, Deputy Director of Qingdao Water Administration Bureau, and other delegates, visited Qingdao Sino French Hairun.



SCIP

On 23 September 2021, Shen Yilong, Director of Shanghai Solid Waste & Chemicals Management Centre, led a delegation on a visit to SCIP SITA.



Chongqing

On 30 September 2021, Chen Su, Chairman of Chongging Water Group, and Zhang Yong, Deputy Chief Economist and General Manager of Operation Department, led a delegation to visit Chongqing Sino French Water's Liangtuo WTP for safety production issues.





Chongqing Changshou

On 11 September 2021, an inspection group from Chongqing, which is focused on the ecological environment protection along the Yangtze River, visited Chongqing Changshou Sino French.

Macao

A delegation from Macao Water visited local community groups several times in the year to introduce a regional water pipe replacement project and collect feedback about the previous project, so as to minimise impact of the replacement work on the residents.

SUF7 Asia Innovation Trophy 2021 results



Entries

Asia Grand Innovation

Best Promotion

Best Innovation

Innovation Nomination

Asia Grand Innovation

Precise Prediction and Application of Water Demand

Chongqing Sino French Water

Clean & Low-Carbon Sludge Incineration Technology and Application in Pudong Sludge

Treatment Infrastructure

Ultra-Long Distance Transportation Solution for Semidry Sludge - Changsha Sludge Drying Project Phase II

Treatment Infrastructure

FEISIGHT - Sustainable Waste Management Digital Platform Promotion

Sustainable Waste Management

Application of SUEZ Light Weight Media Bioreactor in Kaifu WWTP

Treatment Infrastructure

A Digital Project Management Platform Based on Workflow and Document Management

SUEZ Asia Young Talents Innovation Project

Best Promotion

Steam Condensate Comprehensive Utilisation Project Successfully Turns Waste into Treasure

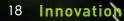
Suzhou SIP Sino French

FEISIGHT - Sustainable Waste Management Digital Platform Promotion

Sustainable Waste Management









Best Innovation

Water Operations

Precise Prediction and Application of Water Demand

Chongqing Sino French Water

Tech-Project Project Management Platform

Governance

Precision Management of Water Supply Network Pressure in Macao

Macao Water

Low-Nitrogen Optimisation and Transformation and Automatic Control Technology Implementation of Dual Fuel Boiler

Chongqing Tangjiatuo

A New Model of Smart Management of Sewage Pipe Network in Residential Estate

Jiangsu Wastewater

Treatment Infrastructure

Clean & Low-Carbon Sludge Incineration Technology and Application in Pudong Sludge

Long-Distance Transportation of High Solid Content Sludge Changsha Sludge Drying Project Phase II

Application of SUEZ Light Weight Media Bioreactor in Kaifu WWTP

Anaerobic Treatment – GAC Regeneration to Solve High Concentration Hardly-Degradable Industrial Wastewater

Engineering Design of Concrete Activated Carbon Contact Tank

Recycling & Recovery

Application of STRO Film in Landfill Leachate Treatment

Derun Simbond

Side Door Automation Project

SCIP SITA

Anti-Collision Tyre Barrier for Site Access

WENT Landfill

Landfill Truck Radiator Cleaning Spray

HK Collection & Transfer Station

Low-Temperature Water Separation Technology (NRS) for Neutralisation of Wastewater Physicochemically

Taiwan Dafa

Developing energy-saving and low carbon emission projects to contribute to China's 'Carbon Peak and Carbon Neutrality' targets



Panjin

reduces Co, emission equivalent to

1,586 tonnes / vear

Installed 2.6MW photovoltaic panels in Panjin Sino French's Wujia Water Treatment Plant, which supplies 30% of the plant's power consumption.



Tianjin Tanggu

reduces chemical consumption by

30%

Optimised the pump operation mode to save energy. Tianjin Tanggu Sino French also used a smart dosing system to reduce chemical consumption.



Chongging **Tangjiatuo**

improves treatment process and equipment performance to save energy

Applying by-pass operation to turn on/off the sludge drying equipment to avoid wet sludge produced during the process from entering the system again and consuming heat repeatedly; Making use of an energy monitoring platform to improve the performance of the pumping station, which accounts for 30% of plant energy consumption; Reusing exhaust heat in boilers to keep the digestion tank warm.



Chongaina

reduces CO₂ emission equivalent to

305 tonnes / year

Upgraded Chongging Sino French Water's two booster stations to reduce power consumption and improve power consumption performance of the booster stations. Flow measurement and regulation optimisation and upgrade of the high-pressure water cooling system was also carried out, reducing power consumption by 399,000kWh per year.

Acting for environmental protection



Macao Water organised a lucky draw event to encourage residents to use e-services to save paper and reduce carbon emissions from resident daily travel.



Chongqing Sino French Water collected trash along the riverside to promote environmental protection.





Chongqing Sino French Water optimised the wastewater collection mode in the laboratory to avoid discharging laboratory wastewater directly into sewage pipes and polluting the environment.



Staff from Jiangsu Sino French Water cleared the weeds around the lake to protect the surrounding environment.

Serving the Community & Contributing to Society

Tianjin Tanggu

We organised 'A Water Drop's Journey' micro-video production contest to develop in young staff a passion for the environment and the water industry.

Chongqing

We organised a blood donation campaign.

Macao

We organised a Water Fun Day to give parents and kids a tour of the main water facilities so as to raise their awareness of environment protection practices.

Chongqing Changshou

We visited the local police and fire stations to serve refreshments to the first responders as a gesture of appreciation for their hard work.

SCIP

We organised a donation drive to help students and underprivileged children in rural areas.





















Taiwan Dafa

We ran a blood donation drive to help people in need.

Tanzhou

To prevent the spread of COVID-19 pandemic, our volunteers supported the government in deploying nucleic acid tests for all town residents.

SCIP

We collaborated with local schools to promote environmental protection know-how among youngsters.

Tianjin Tanggu

Our staff volunteered their services to local communities, as part of an initiative advocated by the Tianjin Water Group, to help residents solve water supply issues.

Nanchang Shuanggang

We raised funds to help the underprivileged families.



SUEZ organises 'Passion for the Environment' fresco workshops

SUEZ is running a continuing series of fresco workshops under the theme of 'Passion for the Environment'. The aim of the workshops is to educate staff about the causes and consequences of climate change, and to reaffirm the Group's commitment to sustainable development. Nearly 260 JV staff attended the recent workshops in Panjin, SCIP and Changshu.









Anti-corruption rules

Acts of corruption are illegal and unethical. They are contrary to the Group's ethical values and would seriously damage the reputation of the Group. They would jeopardise its global businesses in both public and private sectors.

Corruption can be direct or indirect. It also can be active or passive. Corruption can materialise through gifts or any other advantages, whether financial or not and irrespective of their value.



Question

A public officer suggested that I call one of his acquaintances to put an end to the administrative red tape that is slowing down the site for which I am responsible. Since I was tired of waiting, I contacted the person who assured me that the work could be resumed in less than a week if I pay a significant amount of money in cash.

What should I do?

Answer

You should immediately be suspicious of the situation.

SUEZ policy is to formally refuse any undue payment of a public service. Accordingly, it is out of the question for the services of an intermediary to be used if you have questions about their integrity and the use of the funds that will be paid.

You must inform the Legal Department.





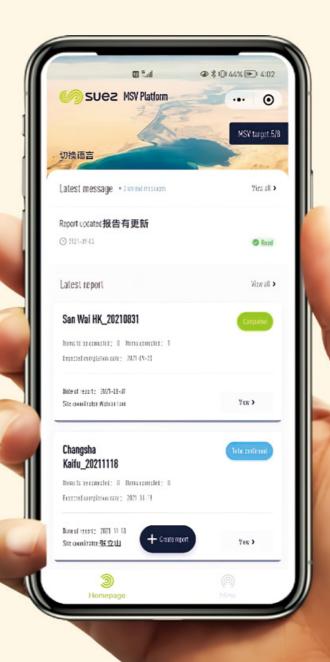
Sharing of H&S good practices

SUEZ Asia Management Safety Visits APP now on line

Management safety visits, exchanges with staff on health and safety issues, as well as safety inspections are considered important measures to shape SUEZ's safety culture.

SUEZ has developed a 'Safety Visits' app to improve the efficiency of safety visits by following up on inspection findings more quickly, providing data analysis as well as sharing of good practices. Over 100 management personnel from SUEZ Asia can upload safety visit reports and involve the related staff from 150 sites to follow up on the safety report and make subsequent improvements after the visit.







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集团动向

| 重庆长寿化工园区 | |
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| 污水处理厂预处理站项目竣工 | |
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创新

| 2021 苏伊士亚洲创新奖结果 | |
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企业关怀

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员工天地

| 苏伊士持续举办热爱环境壁画工作坊 | |
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职安健

| 2021 | 年苏伊士网络危机演练 | |
|------|------------|----|
| | | 25 |

苏伊士旗下澳门石排湾

饮用水厂揭幕

2021年11月30日, 苏伊士旗下 澳门自来水石排湾水厂正式竣工 投运。这将使澳门自来水的日总 供水能力从现时的39万立方米 增加到52万立方米,足以满足 澳门未来 10 年不断增长的用水 需求,是澳门供水事业的一个新 里程碑。在包括来自中央政府派 **驻机构、珠海及澳门相关政府部** 门的重要官员等 100 多名来宾的 共同见证下, 澳门石排湾水厂揭 幕并正式投运。



石排湾水厂采用绿色厂房的建筑概念

通过多采用自然通风采光,并与石排湾水库景观 相融合。



使用苏伊士的专利水处理技术

包括脉冲澄清池、碳脉冲吸附池以及 V 型滤池, 全面去除有机物和微污染物。



部署节能、减排的解决方案

采用太阳能路灯、高效的水泵系统及再生水回用 解决方案。









绿色建筑 减少碳足迹

苏伊士融入澳门社会发展逾30载。石排湾水厂的落成是澳门 供水事业的一个新里程碑。石排湾水厂是澳门首个获得一星 级绿色建筑认证的水厂。它采用了节能及中水回用的解决方 案,不仅减少环境足迹,更大大优化了澳门整体的供水布局。











2021 年第四季,苏伊士在亚洲获 得五项污水处理项目设备供货和 技术服务合约。



福建省邵武市 改良设备以提升污水处理绩效

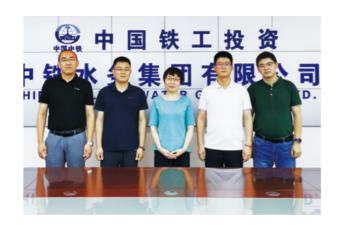
为处理量为 1 万立方米 / 日的邵武市金塘工业园区污水 处理厂提供深度处理工艺段的 Densadeg™ 高密度沉淀 池和 Oxyblue® 臭氧生物滤池工艺设备供货及相关技术 服务,使得出水水质达标排放,减少对当地水环境的影响。在项目执行过程中,苏伊士对曝气盘投加系统进行 改造,解决系统容易堵塞的问题,并首次应用水射器及 辐流式曝气器形式的臭氧投加系统。项目竣工后,苏伊 士将负责运营管理该污水处理厂。



安徽省合肥市 项目被列为巢湖生态示范区 保护修复重点工程

为处理规模为8万立方米/日的污水处理厂提供 Densadeg[™] 高密度沉淀池工艺设备供货及相关技术服 务,使得污水达标排放,保护当地水体环境。





陕西省西安市

处理西安市 23 座污水处理厂产生的 湿污泥实现资源循环利用

为项目 5 条两段式污泥干化处理线提供脱水污泥接收系 统、蒸汽饱和系统、污泥干化系统以及电气控制系统, 实现节能环保, 高效脱水。



江苏省苏州市 确保处理后工业污水达标排放 保护太湖的水体环境

苏伊士为苏州汾湖高新技术产业开发区工业污水处理 厂提供深度处理工艺段的 Densadeg[™] 高密度沉淀池和 Oxyblue[®] 臭氧生物滤池工艺设备供货及相关技术服务, 使出水达标排放,保护太湖及周边的水体环境。项目的 处理能力为1万立方米/日。



宁夏彭阳县 针对小规模市政污水处理领域 采用创新做法

为当地污水处理厂提供一体化 Densadeg XRC[™] 载体, 增强高密度沉淀池处理效果,使出水水质达到《地表水 环境质量标准》准 IV 类标准。

重庆长寿化工园区 污水处理厂预处理站项目竣工

合作公司重庆长寿中法下辖的重庆长寿化工园区污水处理厂预处理站 项目于2021年8月24日竣工并通过验收。新增3万立方米/日污水预 处理能力,可以调节污水流量,监测污水的水质,优化污水处理绩效; 同时,用作应急池,提升了污水处理厂应急处理能力。目前,重庆长寿 中法具备 4 万立方米 / 日工业污水处理能力以及 24 万立方米 / 日的饮 用水和工业用水处理能力。

30,000 立方米/日

重庆长寿合作公司预处理能力





崇州中法及成都中法污水处理厂提标改造项目投运

合作公司崇州中法和成都中法的污水处理厂提标 改造项目均于 2021 年竣工投运。项目主要增加 了采用苏伊士高密度沉淀和脱碳生物过滤技术的 处理流程, 优化了污水处理工艺, 提升出水水质, 达地表水四类标准, 有效保护当地水体环境。目 前,崇州中法污水处理能力为3.96万立方米/日, 成都中法污水处理能力为 1.98 万立方米 / 日。

39,600 立方米/日

崇州合作公司处理量

19,800 立方米/日

成都合作公司处理量

苏伊士与泰国企业 合作推动废塑料 可持续管理

苏伊士循环聚合物设施与泰国 7-11 便利店的创始企业 CP-All 以及暹罗化工合作、推动废塑料可持续管理。根据 2021 年 11 月签订的合同,苏伊士将为塑料袋制造商提供每年 500 吨 优质的、具国际认证的消费后循环再造塑料、生产 7-11 专用 塑胶袋, 以鼓励客户和当地市民支持循环再造, 帮助泰国实 现未来可持续发展。





苏伊士钦州危废项目点火投运

苏伊士与上海华谊在广西钦州港 经济技术开发区的危废处理项目 在 2021 年 8 月 19 日进行点火, 同月24日投入首批废料正式运行。

30,000 吨/年

处理量

3.45 亿人民币

总投资额



苏伊士第三次获 法中委员会创新奖



2021年11月29日,苏伊士与盛虹集团、中石 化炼化工程合作开发的石化废水超低排放绿色解 决方案,凭借其在社会、经济、工业及环境效益 四大方面的卓越表现,荣获法中委员会2021年 "创新首创奖",充分展示苏伊士以创新技术实 现资源化利用、保护环境及生物多样性的理念。



创新是苏伊士的基因,其创新成效多次 获得外界肯定,在连云港为中国实力最 强的石化企业之一提供绿色创新的污水 处理解决方案就是其中的代表。



84%

中国石化项目最高污水回用率



8,000 _щ

每年减少二氧化碳排放量



230万 🛭

每年节约运营成本



苏伊士荣获 "大湾区奖"





2021年10月21日,苏伊士参加在广州举办的大 湾区中法企业家高峰论坛, 并获中国法国工商会 颁发的"大湾区奖",这充分肯定了苏伊士智慧 化及创新的工业污水处理技术,推动大湾区污水 循环利用以及环境可持续发展。在论坛上, 苏伊 土亚洲地区高级副总裁范晓军同与会者交流在中 国开展业务的法国企业在大湾区的市场机遇、投 资和创新方面的优势。

苏伊士积极履行 重庆市和成都市顾问团成员职责





苏伊士连续 16 年以重庆市市长国际经济顾问团成员的身 份参加该年会,为重庆市的繁荣发展出谋划策。在过去 20年,苏伊士对重庆市和成都市环境建设的投入取得喜 人的成绩。未来5年,苏伊士将继续加大对成渝地区及 长江经济带的投资,推动生态修复、能源利用以及碳减排, 助力中国的绿色转型。



成都市政府国际咨询顾问团年会 09/12/2021 成都

苏伊士作为成都市政府国际咨询顾问团的成员, 在年会上 分享了集团的可持续解决方案,旨在推动成都市生态环境 的绿色低碳高质量发展。

苏伊士参加绿色会展推动可持续发展

RETHINK HK 活动 5-6/10/2021 香港

RETHINK HK 是香港在可持续发展方面最具影响力 的商务活动。苏伊士亚洲地区固废资源管理首席执行 官贺德琛以及苏伊士亚洲地区水务首席执行官方恒业 在会上与抱着共同发展理念的与会者分享了集团可持 续发展战略及其对推动全球循环经济的贡献。实现可 持续发展需要我们每个人贡献力量、依靠政府、企业 以及市民之间的通力合作共同实现。让我们继续携手 推动碳中和。





中国城市水环境与 水生态发展大会 27-29/09/2021 长春

苏伊士的专家在会上就如何利用可持续水务管理系统 以及创新的数字化技术实现未来低碳发展,分享了集 团的技术和管理经验。









3 亚洲国际环保博览 27-30/10/2021 香港

苏伊士的客户、合作伙伴、同行以及香港的学生到苏伊士的展台参观,了解集团为客户提供的 100% 可持续解决方案。苏伊士自 1987 年开始进入香港市场,长期以来致力推动香港实现循环经济和可持续发展。我们矢志不渝支持香港实现新的低碳目标,协助其全面转型。











中法企业 绿色可持续发展论坛 17/10/2021 广州

在 2021 年中法环境月开幕式暨粤港澳大湾区中法企业绿色可持续发展论坛上,苏伊士代表分享了集团为客户提供的 100% 可持续及基于自然的解决方案。超过 20 家来自不同领域的企业、团体和科研机构齐聚广州科学中心就可持续发展和环保等议题进行交流。

2021年上海化学工业区 环境研讨会

2021年上海化学工业区环境研讨会在 11 月 11 日举行,吸引了 100 多位行业专家 到场,超过 5,000 人在线参加。近 20 名专业技术人员就化工区环境治理、智慧化固 废处置、污水厂数字化与精细化发展、环境法律法规与碳中和相关政策等发表了主 题演讲。今年是苏伊士在上海化学工业区成立研发中心的第 15 年,通过其研究成果 的转化帮助工业客户迎接未来的挑战,同时更好地为园区、苏伊士以及我们客户实现绿色发展。















朱斌 上海化学工业区 管理委员会副主任

上海化学工业区管理委员会副主任朱斌 为研讨会开幕致词,表示上海化学工业 区将继续坚持低碳环保、绿色高效的可 持续发展原则,努力建成具国际影响力 的世界级石化产业基地和循环经济示范 基地,助力国家实现"双碳"目标。



郭仕达 苏伊士亚洲首席执行官

苏伊士亚洲首席执行官郭仕达在线上为 研讨会致辞。他表示苏伊士希望通过创 新手段,进一步加强其成为客户首选合 作伙伴的地位,并寄望上海化学工业区 的水研究中心和固废研究中心把科研成 果转化和应用,提升合作公司运营绩效, 更好地服务园区。



以技术手段实现 苏伊士中国 运营绩效转型

为支持集团实现 2023 年全球运营绩效 转型的目标, 在中国, 我们明确了四个 专业板块,设定循序渐进的、可量化的 目标,通过技术改良及精细化管理提升 运行绩效。这四大板块包括:能耗和药 耗、漏损控制、资产维护及优化、外勤 管理。在执行的过程中, 我们还通过大 数据分析工具 Power BI 展示项目实施 讲度和效果, 跟踪关键指标, 及时评估 并优化方案的实施。



能耗和药耗

2020 - 202103

2020 - 2023

已经节省

目标节省

150 万欧元

106 万欧元

塘沽中法应用智慧加药系统后、与2019 年同期相比,平均药耗节省20-30%;

上海化工中法通过优化水泵调度, 节省 25% 电耗。



2020 - 2021Q3

2020 - 2023

已经节省

日标节省

3万欧元

22 万欧元

重庆中法唐家沱利用闲置的 DN600 气体流量计的零件更换在用的 DN400 气体流量计的受损零件、减少额外购置新 DN400 气体流 量计的费用。

江苏中法水务在污泥脱水系统中采用螺杆泵输送污泥方式代替经 常换损坏的螺旋输送机,降低故障率,节省了维修费用。



2020 - 2021Q3

2020 - 2023

已经节省

目标节省

20 万欧元

28 万欧元

上海化工中法新上线管网外勤管理系统,优化 派单流程,复盘行动轨迹,未来还将通过数据 分析计算外勤效率, 实现更精细化的管理。

澳门自来水通过远程监控的方式, 使新的石排 湾水厂实现无人值守,减少人员的需求。



2020 - 2021Q3

2020 - 2023

已经节省

目标节省

225 万欧元

83 万欧元

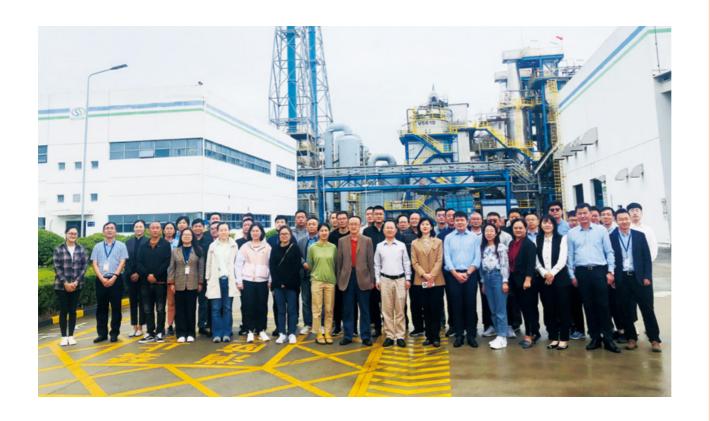
三亚中法通过调节供水压力、更换过期水表、水表选型等,产销 差率从 2019 年的 19.4% 下降到 2021 年 10 月的 16.9%;

重庆中法供水通过加强测漏工作、降低明暗漏比指标、及时更 换过期水表、加强稽查巡查力度等工作、产销差率从 2019 年的 15.4% 下降到 2021 年 10 月的 14%;

澳门自来水通过对新技术的探索与实施,提高测漏效率、水表计量准 确性等,产销差率从2019年的7.8%下降到2021年10月的6.8%。

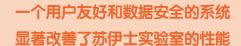
苏伊士在上海化工区 主持全国危废管理 技术交流

2021年10月12-14日,苏伊士携手中国生态环境部固体废物 与化学品管理技术中心在苏伊士位于上海化学工业区内的固废 资源管理设施内举办为期三日的危险废物利用处置和经营管理 技术培训,逾30位来自政府监管部门的危废处置管理人员参 加。这是双方自 2014 年开始持续开展的合作项目、旨在分享 全面详细的危废设施运营与管理经验和优秀做法。



苏伊士实验室 信息管理系统 2.0

苏伊士于 2005 年开始在中国的水务实验室陆续 应用实验室信息管理系统。今年, 苏伊士亚洲水 务技术专家对系统进行改良,推出实验室信息管 理系统 2.0,以提升实验室的绩效。新系统可于 网页或者平板电脑和手机的客户端进行操作,数 据容量大,目应用防火墙保护用户数据安全。目 前,系统已应用于中国14家合作公司的实验室, 还有9家合作公司计划于2022年使用此系统。





江苏中法水务

获三项国家实用新型专利证书

由江苏中法水务自主研发的"一种水样自动蒸发浓缩装置 水质检测中心在美国爱德士举办的"2021年 NSI 水中 的加热结构"、"一种水样自动蒸发装置"、"一种耐腐 蚀远红外干燥箱" 等三项科研成果,获得了国家实用新 型专利证书。三项专利是针对放射性检测中样品预处理的 风险而设计的,能有效减低操作员工的安全风险,也能减 少运营成本。



坦洲自来水

在水质监测评比中获满意结果

微生物能力验证"中获得满意结果并获颁荣誉证书。 国内 26 个省市共 194 家企业参加了此次活动。



重庆中法环保研发中心

获重庆创新创业大赛二等奖

由合作公司自主研发的 Aquaqile® SACS 污水处理智能 曝气系统在 432 个参赛项目中脱颖而出、获得重庆中 小企业创新创业大赛决赛二等奖。



重庆中法供水

获重庆水务集团精细管理优胜项目奖

由青年员工优化改良的无线测温系统获评为重庆市水务集 团精细管理优胜项目奖。举办此评选的目的是为了提升青 年员工的专业技能,让他们更爱岗敬业。





江苏

2021年10月21日,常熟市政协副主席金健峰到长江应急水库进行水务调研,了解江苏中法水务关于应急水库的运行、水质保障、安全管理及工艺改造等方面的情况。



西安

西安建筑科技大学师生一行到西安中法进行考察学习。校 企就后续建立产学研教育基地进行了交流,开启校企合作 的新篇章。



苏伊士中国技术管理与发展部

2021年10月13日至14日,苏伊士中国水务技术专家到青岛中法海润召开设备维护技术交流大会,分享各自领域的先进技术和经验,并学习同行新产品、新技术。



青岛

2021年11月3日,山东省安全生产督察组在青岛市水 务管理局副局长周卫东等领导陪同下到青岛中法海润进 行安全生产专项检查。



上海化学工业区

2021年9月23日,上海市固体废物和化学品管理技术中心沈亦龙主任一行到上海化工升达参观调研。



重庆

2021年9月30日,重庆市水务环境集团董事长陈速、副总经济师及运行管理部总经理张勇等到重庆中法供水梁沱水厂进行安全检查。





重庆长寿

2021年9月11日,重庆市长江生态环境保护民主监督调研组到重庆中法长寿调研生态环境保护工作。

澳门

澳门自来水多次拜访社团,介绍水管更换工程计划,并 聆听市民意见,尽量减低工程对市民产生的影响。

SUEZ ASIA ESSENTIAL_ISSUE 06

2021 苏伊士亚洲 创新奖结果



参赛项目

6 1

亚洲最高创新奖

2↑

推广应用奖

15 ↑

最佳创新奖

47 ↑

创新提名奖

亚洲最高创新奖

需水量精准预测及应用

重庆中法供水

浦东污泥清洁低碳型

创新焚烧工艺及应用

水务工程

长距离输送高含固率污泥方案 长沙污泥干化项目二期

水务工程

FEISIGHT--

可持续固废数据管理平台的推广应用

固废可持续管理

苏伊士轻质滤料滤池 FBBR 在 开福污水处理厂的应用

水务工程

基于工作流及文档管理系统的 数字化项目管理平台

苏伊士亚洲新锐人才创新项目

推广应用奖

蒸汽冷凝水变废为宝 综合利用完成华丽转身

苏州中法环境

FEISIGHT--

可持续固废数据管理平台的推广应用

固废可持续管理





最佳创新奖

水务运营

需水量精准预测及应用

重庆中法供水

Tech-Project 项目管理平台

管理体系部

澳门管网压力精细化管理

澳门自来水

双燃料锅炉低氮优化改造及

自动控制技术实施

重庆唐家沱

居民小区污水管网

智慧化管理新模式

江苏中法污水

水务工程

浦东污泥清洁低碳型

创新焚烧工艺及应用

长距离输送高含固率污泥方案

长沙污泥干化项目二期

苏伊士轻质滤料滤池 FBBR

在开福污水处理厂的应用

厌氧处理——

GAC 再生解决高浓度难降解工业废水

混凝土结构活性炭接触池设计

固废资源管理

STRO 膜在填埋场渗滤液处理中的应用

德润新邦

边门自动化项目

上海化工升达

工地通道防撞轮胎障碍栏

香港新界西填埋场

车辆散热器清洁喷射设备

香港垃圾收集及转运业务线

物化中和废水低温水分离技术 (NRS)

台湾大发

节能、降耗、减排 助力国家实现"双碳"目标



盘锦

减排二氧化碳当量

吨/每年

盘锦中法辖下的吴家水厂清水池上方安装 2 兆瓦太阳能光伏板,供应全厂 30%用电。



天津塘沽

减少药耗

30%

优化泵组运行方式节约能耗并使用智能加药系统减少药耗。



重庆唐家沱

优化污泥干化工艺和 设备、实现节能降耗

采用渐进式污泥干化设备启停操作,避免过程中产生的稀泥再次进入系统重复消 耗热量:借助能源监控平台,提升占全厂30%能耗泵站的绩效:回收锅炉余热, 对消化罐保温。



重庆

减排二氧化碳当量

吨/每年

对两个加压站进行技术改造、降低用电损耗、提升加压站用电绩效: 另外对 高压机组冷却水进行测流调流优化改造、每年节省电耗 39.9 万千瓦时。

以实际行动 践行环保承诺



澳门自来水举办抽奖互动,鼓励市民使用电子服务,减少使用纸张印单以及市民使用交通工具出行的碳排。



重庆中法供水志愿者收拾江边垃圾,向公众传递环保信息。





重庆中法供水优化实验室废水收集方式,避免 实验室废水直排污水管道,污染自然环境。



江苏中法员工组织清除水源地周边杂草,保护水源地的环境。

服务社区 贡献社区

天津塘沽

天津塘沽中法举办"一滴水的旅行"微视频创作活动,培养青 年员工热爱环境、热爱供水事业。

重庆

重庆中法供水组织无偿献血活动。

澳门

澳门自来水举办"亲水乐悠游"亲子活动,让市民认识供水设 施、培养爱护环境意识。

重庆长寿

重庆长寿中法慰问当地警察和消防员,并送清凉饮品。

上海化工中法

上海化工中法组织员工为贫困地区儿童爱心捐物,并在当地社 区进行帮学助困。





















台湾大发

发起了一场献血运动帮助有需要的人。

坦洲

为防止疫情的扩散,坦洲自来水多名自愿者积极支援镇区 的全民核酸检查。

上海化学工业区

上海化工升达与当地学校合作,促进青少年环保科普教育。

天津塘沽

塘沽中法参加天津水务集团组织的供水服务进社区志愿服 务活动。

南昌双港

南昌双港组织捐款活动帮助贫困家庭。





苏伊士持续 举办热爱环境 壁画工作坊

为让同事了解气候变化的成因和影响,并向他们传递集团推动可持续发展的坚定承诺,苏伊士持续举办热爱环境壁画工作坊。近期在盘锦、上海化学工业区和常熟的合作公司近260人参加了该工作坊。









反腐败规定

腐败行为是违法和不道德的,与苏伊士集团的道德价值观背道而驰。腐败行为严重损害集团声誉,影响全球的业务。

腐败可以是直接或间接的,也可以是主动或是被动的。腐败是以送礼或收礼的方式,或者其他任何方式,提供或获得非法的好处。不论是否与金钱有关,也不论价值多少。



问题

一位公职人员建议我向他推荐的好友寻求帮助,请他尽快结束导致我所负责项目进度延迟的繁琐行政审批流程。由于我等待项目审批已经很久了,于是就联系了这人,他答应如果我肯支付一笔现金,那么相关现场工作可以在一周内恢复。

我该怎么办?

答案

你应该立即对此情况产生怀疑。

苏伊士集团的政策是要拒绝任何对于公共 服务部门的不当付款。因此,如果你对中 间人的诚信以及支付款项的用途有疑问, 那么绝对不要接受这个中间人的服务。

你必须通知法务部。



报告进行相关跟进和整改。



职安健优秀做法分享

苏伊士亚洲管理人员安全巡视小程序上线

管理人员前往现场,与员工互动交流,讨论健康安全话题,并进行安全巡视,是苏伊士塑造安全文化的重要举措。 为提高安全巡视效率,更快地跟进巡视发现、分析巡视数据和分享优秀做法,苏伊士开发了"安全巡视"小程序。 在安全巡视完成后, 苏伊士在亚洲各地 100 多名巡视人员可以通过小程序对 150 个被巡视现场所提交的安全巡视

巡视人员填写并 现场人员接收并 提交巡视报告 跟进报告(逾期提醒) 被巡视人员收到 被巡视现场提交 整改完成通知 整改完成证明 整改 未达到预期 整改达到预期 安全巡视完成 优秀做法和

常见问题的分享

