

**SANITATION IMPROVEMENT IN  
UZBEKISTAN  
BY JAPANESE SITE TREATMENT PLANT  
(STP: JOHKASOU)**

PRESENTATOR:

SHINOBU TERAO

CHAIRMAN OF TERAO LITECH CO., LTD

DATE:

13TH MARCH, 2024




# 1. INTRODUCTION

- TELAO LITECH CENTRAL ASIA (TLCA) IS A JAPANESE COMPANY IN UZBEKISTAN ADVOCATING THE INTRODUCTION OF STP (JOHKASOU), CONSTRUCTION OF FACILITIES AND WATER SUPPLY IN AREAS WITH POOR SANITARY CONDITIONS.
- TLCA AIMS TO MANUFACTURE STPS MADE IN UZBEKISTAN USING JAPANESE TECHNOLOGY, AND IN THE FUTURE, WE ARE LOOKING TO EXPAND FROM UZBEKISTAN TO ALL OF CENTRAL ASIA BY CONTRIBUTING TO THEIR ECONOMIC GROWTH.



## 2. TLCA ESTABLISHMENT

- FOUNDED IN 2020, TLCA FIRST INSTALLED TWO SMALL-SCALE STPS (JOHKASOUS) IN ANDIJAN AND KHOREZM IN 2021. IN 2023, ONE LARGE-SCALE STP HAS BEEN INSTALLED IN KHOREZM, AND ONE LARGE-SCALE STP WILL BE IMPLEMENTED NEAR TASHKENT THIS YEAR AS WELL.
- WE CURRENTLY WORK CLOSELY WITH THE GOVERNMENTS OF UZBEKISTAN AND JAPAN, AS WELL AS INTERNATIONAL ORGANIZATIONS SUCH AS THE UNDP. WITH THE HIGH PERFORMANCE OF OUR STP, WE HOPE TO CONTRIBUTE TO ITS WIDESPREAD USE BY MAKING STEADY EFFORTS.

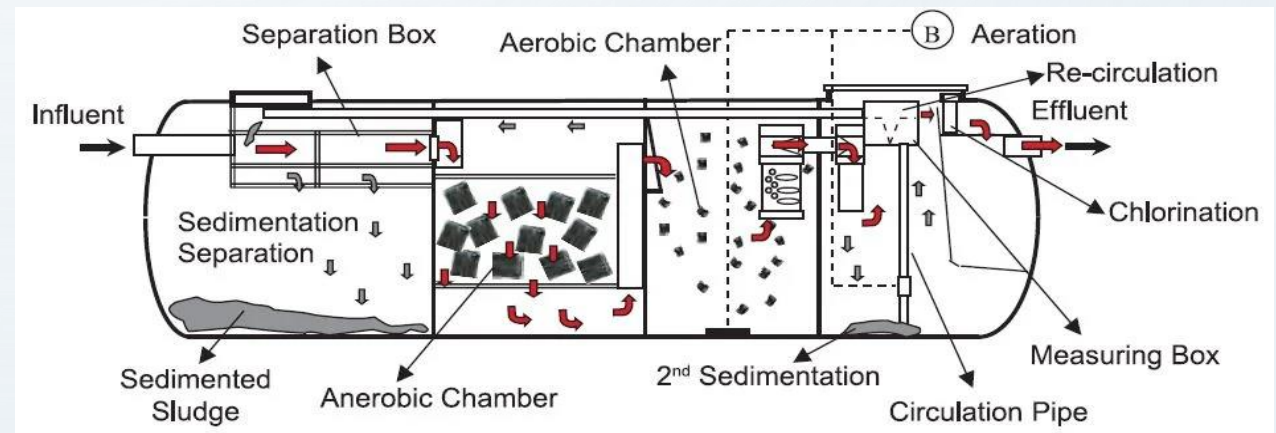


The screenshot shows the website 'Халқ сўзи online' with a search bar and a menu. The main article is titled 'Андижон оқова сув тизимида япон технологиясидан фойдаланилади'. The article is dated 21 December 2021 and has 135 views. Below the article is a photo of a group of people in business attire standing around a table, with the caption 'Фото: «Халқ сўзи»'. At the bottom, there is a paragraph in Uzbek: 'Япониянинг "Terao Litech Co.Ltd" компанияси вакиллари Андижон вилоятида бўлди. "Андижон сув таъминоти" МЧЖдаги учрашув давомида ҳудудда локал канализация тармоқларини барпо этиш,'



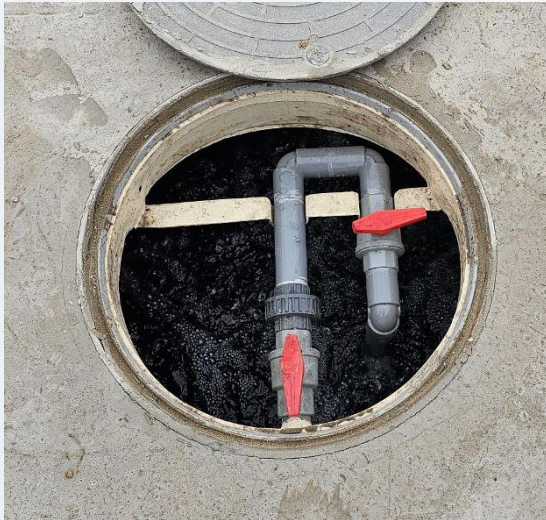
# 3. INTRODUCTION OF JOHKASOUS

- TLCA IS IMPROVING SANITATION IN THE URGENCH CITY 31 PUBLIC SCHOOL THROUGH THE INSTALLATION OF JOHKASOU (STP), BENEFITING AROUND 1000 STUDENTS AND STAFF AGED 6 TO 15.



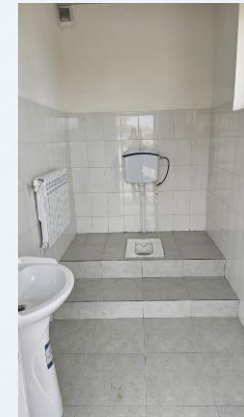
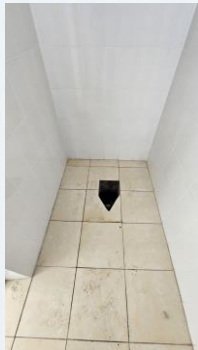
# 50 M<sup>3</sup> TANK IN URGENCH FOR 1000 STUDENTS AT URGENCH 31 SCHOOL IN XOREZM

- Thanks to new STP and flush toilets, their education environment is now better without bad smell in addition to cleaner water environment in the area.
- Current operation is well three months after the installation.

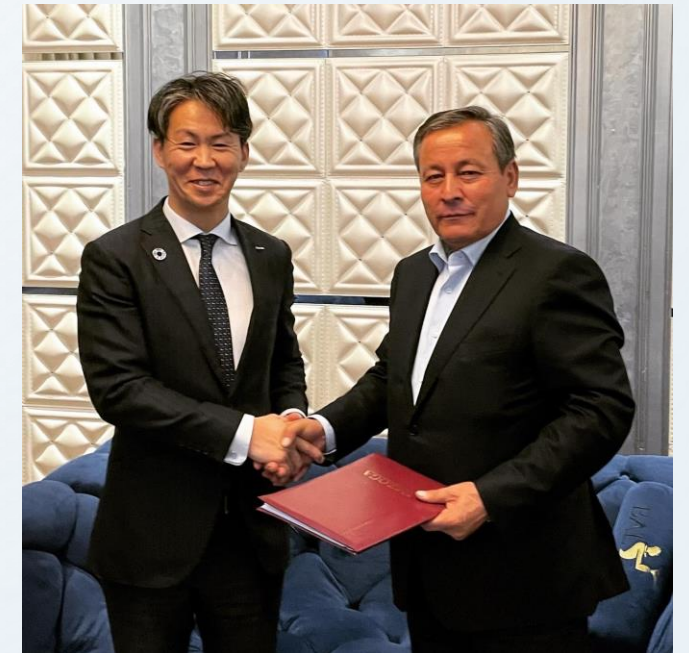


## 4. CURRENT STATUS REPORT

- STP installations have led to significant improvements in sanitation, evidenced by the elimination of foul odors and enhanced hygiene standards.
- Water from toilets used to be discharged to a ditch nearby, but now the treated water from STP is flown to a ditch abiding the national water quality regulation values.



# TWO 1 M<sup>3</sup> TANKS IN ANDIJAN FOR 20 PUPILS AT A KINDERGARTEN IN 2021



# TWO 1 M<sup>3</sup> TANKS IN XOREZM FOR 20 PERSONS AT A HOSPITAL IN 2021



 ХОРАЗМ ВИЛОЯТИ  
ҲОКИМЛИГИ

ОҚАВА СУВЛАРНИ ҚАЙТА ИШЛАШ  
БОРАСИДА ЯПОН ТЕХНОЛОГИЯЛАРИДАН  
САМАРАЛИ ФОЙДАЛАНИШ  
ИМКОНИЯТЛАРИ МУҲОКАМА ҚИЛИНДИ

02.07.2021

Бугун вилоят  
ҳокими Фарход  
Эрманов Япониянинг  
“Terao Litech Co.Ltd”  
компанияси раиси Шинобу Терао  
бошчилигидаги делегация аъзоларини  
қабул қилди.



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# 5. BENEFITS OF STP ADOPTION

- ADOPTION OF STPS PROMISES IMPROVED SANITATION AND HYGIENE STANDARDS, ALONG WITH REDUCED WATER POLLUTION AND ENVIRONMENTAL CONTAMINATION.
- THESE EFFORTS CONTRIBUTE SIGNIFICANTLY TO ACHIEVING SUSTAINABLE DEVELOPMENT GOALS IN THE REGION.



## 6. CHALLENGES IN IMPLEMENTATION

- CHALLENGES SUCH AS LEGAL HURDLES, MAINTENANCE ISSUES, AND COST CONSIDERATIONS HINDER WIDESPREAD STP IMPLEMENTATION ALONG WITH THE HIGH COST OF TRANSPORT OF TANKS TO UZBEKISTAN.
- STRICT WATER QUALITY REGULATIONS EXACERBATE THESE CHALLENGES.
- FURTHER, LOCAL CITIZENS ARE NOT YET AWARE OF THE RISKS OF WATER POLLUTION.

- UZBEK TREATED WATER QUALITY REGULATION

pH	E.Coli /cm <sup>3</sup>	BOD or COD	SS	Nitrogen	Phosphorus
6.0-9.0	Not detected	5-10	Unregulated	3-45	Unregulated

- JAPANESE TREATED WATER QUALITY REGULATION

pH	E.Coli /cm <sup>3</sup>	BOD or COD	SS	Nitrogen	Phosphorus
5.8-8.6	3000	10-30	20-60	10-30	1-5

# 7. NEXT STEPS

- TLCA ADVOCATES FOR WIDESPREAD STP ADOPTION, EMPHASIZING COLLABORATION WITH GOVERNMENTS AND STAKEHOLDERS TO ADDRESS IMPLEMENTATION CHALLENGES.

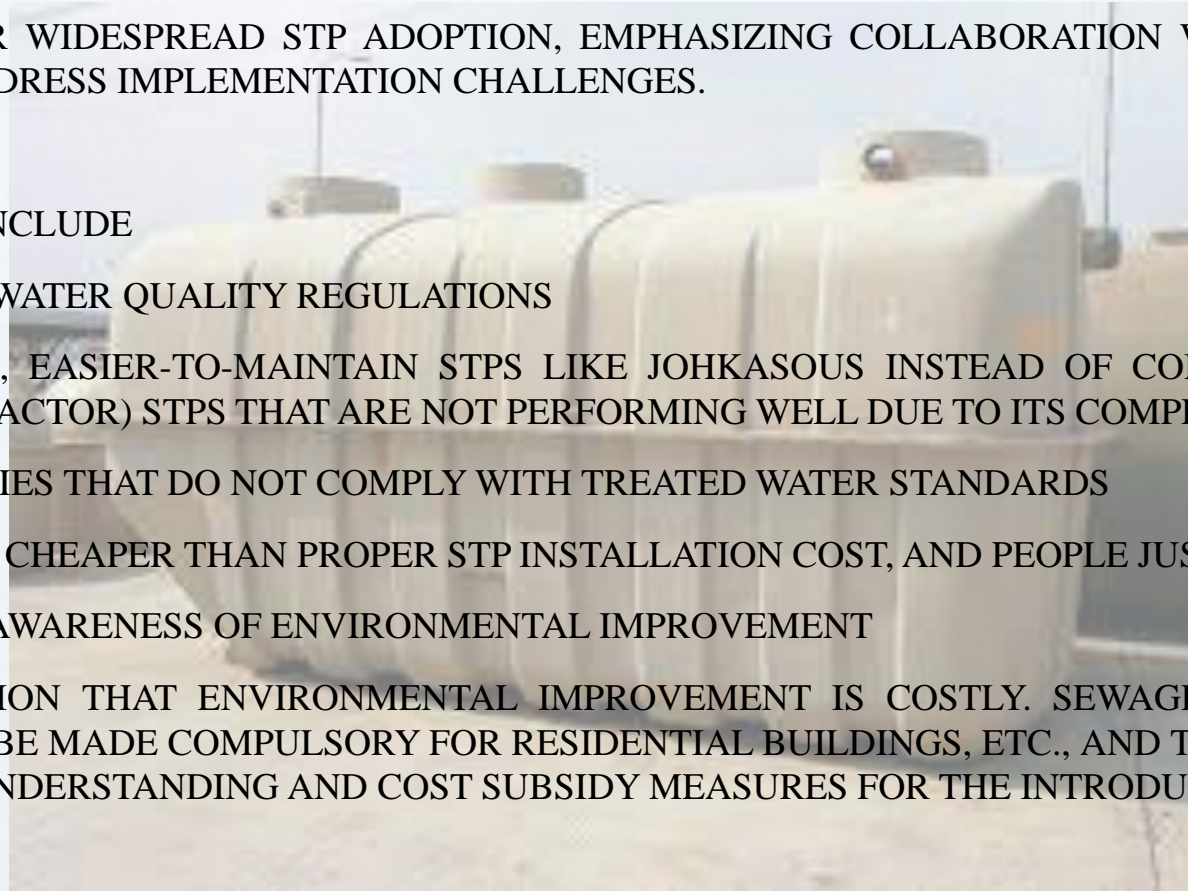
- RECOMMENDATIONS INCLUDE

1. REVISING TREATED WATER QUALITY REGULATIONS
2. ADOPTING SIMPLER, EASIER-TO-MAINTAIN STPS LIKE JOHKASOUS INSTEAD OF COMMONLY INSTALLED MBR (MEMBRANE BIO-REACTOR) STPS THAT ARE NOT PERFORMING WELL DUE TO ITS COMPLICATED MAINTENANCE.
3. PUNISHING COMPANIES THAT DO NOT COMPLY WITH TREATED WATER STANDARDS

CURRENT PENALTIES ARE CHEAPER THAN PROPER STP INSTALLATION COST, AND PEOPLE JUST PAY THE FINE.

4. FOSTERING PUBLIC AWARENESS OF ENVIRONMENTAL IMPROVEMENT

THERE IS NO RECOGNITION THAT ENVIRONMENTAL IMPROVEMENT IS COSTLY. SEWAGE CONNECTIONS AND STP INSTALLATIONS SHOULD BE MADE COMPULSORY FOR RESIDENTIAL BUILDINGS, ETC., AND THE GOVERNMENT SHOULD CONSIDER PROMOTING UNDERSTANDING AND COST SUBSIDY MEASURES FOR THE INTRODUCTION.



# 8. CONCLUSION

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- TLCA'S EFFORTS DEMONSTRATE TANGIBLE IMPROVEMENTS IN SANITATION AND ENVIRONMENTAL SUSTAINABILITY IN UZBEKISTAN.
  - DESPITE CHALLENGES, STP ADOPTION PROMISES SIGNIFICANT BENEFITS FOR THE REGION'S WATER AND SANITATION INFRASTRUCTURE.
  - COLLABORATIVE EFFORTS ARE ESSENTIAL TO OVERCOME OBSTACLES AND ENSURE ACCESS TO CLEAN WATER AND SANITATION FOR ALL IN UZBEKISTAN.