



وقدة العماية البيئية
Environmental Control Unit



Environment Control Unit Monitoring sewerage system

**Nablus municipality – Palestine
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General information

- ❖ Population = **200,000**
- ❖ Mountain city-old city – handicrafts and some industries (sweet- stone cuttings, tahina factory.....)
- ❖ Water supply = 100% (**intermittent supply- Rotation**)
- ❖ Wastewater = **97% connected** to public sewerage
- ❖ Consumption water per capita per day = **80 L**
- ❖ Nablus municipality with total employees of around 2000 provide water , wastewater, solid waste.....) to the residents
- ❖ **Limited water resources, political and financial situations** are main **challenges**



KfW Funded Projects in Nablus

Project	Year Start	Year End	Budget (EUR)
Water Loss Reduction 1+2	2000	ongoing	20,000,000
Nablus-West WWTP+ Restoration measures+ Sewerage network for villages+ CHP unit	2002	ongoing	48,000,000
Nablus-East Sewerage and Sewerage network for villages+ Reuse	2014	ongoing	40,000,000
Accompanying Measures ECU	2014	2016	350,000

Status of Waste water sector in Nablus

- In 2013, the waste water treatment plant (WWTP) has been started its work , it is planned to serve 50% of Nablus city and five villages located nearby.
- The WWTP **uses biological treatment** to treat the **domestic waste water.**



- The industrial wastewater and the sludge evacuated from the septic tank from the villages are discharging to the open area resulting in environmental disaster to the whole area.
- In **2018** it is expected to operate the **Eastern** waste water treatment plant to serve the remaining part of the city and the nearby 6 villages.



Factories in Western and Eastern area

Factories	Unit number	Main pollutant
Stone cutting	61	Suspend solid
Chemicals	10	No pollutant
Olive mills	10	High organic compounds, phenol, low pH. Total scolds
Tahina	16	Salt
Dairy	1	
Slaughter houses	1	Solid
Soap	3	No pollutant
Tannery	1	Chrome
Aluminum	1	Chrome
Other	25	

Aim of Environmental Control Unit

Established in 2016

The main aim is **to protect municipality** assets and **improve health & environmental conditions**



The overall objective of the ECU

Improvement of the Sanitation Sector in Nablus through:

- Support the industrial sector to make **pretreatment** for their waste water before connecting to WWTP according to environmental and hygienic criteria
- **Monitor** the usage of treated waste water and sludge to assure using it in safe way
- Evacuating of **septic tanks** in correct way
- **Control the waste water** collecting system inside the city

Tasks of ECU

- **Monitoring of :**
 - Industrial Discharges
 - Cesspits evacuation
- **Permitting of Industrial connection to Nablus municipal sewer**
- **Counseling**
- **Public awareness**

What have been done up to now

1. Conducting **case studies** (WWTP, Aluminum ,Tahina , jeans , chemicals , and olive mill)
 - Testing the procedures ,studying the effect of industrial effluents on waste water system and understanding the manufacturing process.



1. **Field tours for the factories** : up to now more than 70 factories were visited . Introducing the ECU, pretreatment projects, updating data base, public awareness
2. **Data base program** : The team collect information about the industries in the western and eastern areas
3. **Preparing :connection Permission form , conditions and procedures**
4. Setting performance indicator (KPI's) for the sewage system to monitor and evaluate



The legal framework for ECU

1. Based on bylaw (16) “ connecting industrial and commercial facilities to public sewerage system” which shows the procedures to connect the industries to the public sewer and how to monitor them.
2. In this bylaw, it is mentioned what type of industries that **aren't allow to connect**. And which ones need pretreatment , the quality of waste water that can enter the public sewer from relevant industries....

Institutional framework for unit

- Forming an **advisory committee**, including the following Nablus Municipality, Ministry of Local Government, Ministry of National Economy, Environment Quality Authority, Ministry of Agriculture, Water Authority, Ministry of Health.
- The main task for this AC is **discuss any violation** from industries and take action by each one according to his authority.

Conclusion

- ECU start working with industries through **case studies and field visits**
- The way for success in achieving the ECU goals is **to work together with all parties**
- Solving any Environmental problems needs:
 1. **Feasible solutions** for the industries
 2. **Education** and awareness
 3. implementing the **regulations and laws.**

Thank you for your kind attention