

# **New Hurghada International Airport Wastewater Treatment Plant**

## **Background**

Hurghada International Airport is the international airport of Hurghada in Egypt. It is located inland, 5 km (3.1 mi) southwest of El Dahar, the city center of Hurghada. It is the second busiest airport in Egypt after Cairo International Airport and an important destination for leisure flights mainly from Europe. The airport is able to host up to 13 million visitors annually. The new terminal has a total area of 92,000 square meters on three levels. The departure hall has 72 check-in counters and 20 departure gates..

Sewage treatment plants located at airports are characterized by heavy flows due the congested operations, especially holidays and vacations. This requires increased care and control over the outputs of these plants, which must conform to all local and international environmental standards.



(Extended Aeration treatment system)





### **Solution**

**Vales** Company is a pioneering, unique, and distinguished company in the management, operation, and maintenance of sewage plants

**Valens** provides engineering, conservation, operation and maintenance services, as well as other highly qualified services resulting from its extensive knowledge of these systems and long-lasting presence on these markets

#### **Operation and Maintenance Program**

Key components of an operation and maintenance program include:

- 1. Regular inspections: Scheduled inspections help identify potential issues before they escalate into major problems. Inspections should be conducted by trained personnel who can spot signs of wear and tear or other issues.
- 2. Preventive maintenance: Regular maintenance tasks, such as lubrication, filter changes, and cleaning, can help prevent breakdowns and extend the lifespan of equipment. A preventive maintenance schedule should be established and followed consistently.
- 3. Repairs: When issues are identified during inspections or maintenance tasks, repairs should be carried out promptly to prevent further damage. Repairs should be done by qualified technicians using the right tools and equipment.
- 4. Training: Proper training of personnel is essential for the successful implementation of an operation and maintenance program. Training should cover equipment operation, maintenance procedures, and safety protocols.

By implementing a comprehensive operation and maintenance program, businesses can ensure the reliability and efficiency of their equipment, leading to improved productivity and reduced downtime

#### **Results**

Laboratory test analysis results (The results indicate that the treated wastewater meets the reuse standards outlined in Code No. 501/2015, Grade A.)

National Research Centre Analysis and Consultation Unit Domain of Evaluation and Remediation of Hazardous industrial Wastes



المركز القومى للبحسوث وحدة التحاليل والإستشارات المجال الاستشاري لتقييم ومعالجة المخلفات الصناعيه الخطرة

شركه فالنس للتجاره والخدمات محطه معالجه مطار الغردقه الجديد

التاريخ : ٢٠٢٤/٢/٢٤ اسم العينه : مخلف معالج

التاريخ: ٢٤/٢/٢٤٠	*	اسم العينة : مخلف معالج		
العنصر		الوحدة	المخلف النهائى	*کود رقم ۱ . ۵/۵ . ۱
لرقم الهيدروجيني pH			٧,١	
لعكاره		NTU	.,01	٥
لاحتياج الأكسجينى الكيميائي	COD	مجم أ-/لتر	71	
لاحتياج الأكسجينى الحيوي	BOD	مجم أ-/لتر	17	10
لمواد العالقة الكلية	TSS	مجم/لتر	1 £	10
لمواد الذائبة الكلية	TDS	مجم/لتر	7	
لزيوت و الشحومات	O&G	مجم/لتر	۲,۲	
لكلور المتبقى	CI	مجم/لتر	٠,٨	
العد الاحتمالي لبكتريا ايشريشيا	کولای (EC)	MPN/100ml	لايوجد	٧.
دد بويضات النيماتودا المعويه Intestinal nematodes /lite		بويضه / لتر	لايوجد	١

تم تجميع العينات بمعرفه المسئولين بالمركز القومى للبحوث

التقرير

النتائج الموضحه تبين توافق مواصفات مياه الصرف الصحى المعالجه مع معايير اعاده الاستخدام

کود رقم ۲۰۱۰/۰۱۱

أ.د/ فايزه على نصر وا مرح الراركر رئيس العجال الاستشاري كا / لا / ح ع - ٢

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### **Conclusion**

Thanks to the successful and anticipated results achieved by Valens Company in managing the station, the contract with them has been extended from the initial date 13/10/2021 and is still ongoing.

#### **Contact**

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