



Port Facility & Ore Shiploaders – Supply & Install Real-Time Dust & Weather Monitoring Systems

Customer Requirements

Port of Townsville is situated in close proximity to residential and tourist destinations. The client aimed to minimise and address the impact of dust on the surrounding environment during ship loading activities.

Challenges

The accessibility of mains power in the vicinity of the shiploader.

Solution

TES integrated solar power near reference real-time particulate monitoring at strategic locations, positioning sensors near the ship loader and between the loader and the township. The implementation offered the client immediate access to live data during loading activities to ensure dust levels remained within acceptable limits. Utilising real-time wind data, the operations team could halt operations if wind speeds exceeded prescribed limits blowing towards the town. Additionally, TES established a real-time alert system, sending SMS notifications to the client in the event of dust level exceedance. This comprehensive integration enabled centralised monitoring and management, granting the client remote access to instantaneous data and tailored alerts as per their specifications.

Case Study Summary

- Townsville Port, Queensland Australia
- Dust and weather monitoring
- Products:
 - > DMP7000 Real-time Dust Monitoring System
 - > Lufft WS200 and WS100 Weather Sensor
- Ship loading facility
- 5 new Dust monitoring stations successfully installed with real-time remote data access, and real-time alerts.

Value to Client

Following the successful implementation, the client now benefits from real-time data insights, allowing proactive management of dust levels and airborne particulates during ship-loading activities. The integrated system guarantees that ship-loading activities do not adversely affect the surrounding environment and residents. The real-time data visualisation and alerting system have empowered the client to monitor, mitigate, and eliminate potential environmental impacts, thereby safeguarding the well-being of the environment and residences and ensuring a sustainable and compliant operation.