

**WRITTEN QUESTION TO THE MINISTER FOR THE ENVIRONMENT
BY DEPUTY R.J. WARD OF ST. HELIER CENTRAL
QUESTION SUBMITTED ON TUESDAY 30th MAY 2023
ANSWER TO BE TABLED ON TUESDAY 6th JUNE 2023**

Question

“In relation to air quality monitoring, will the Minister update the Assembly in respect of –

- (a) the current position regarding air quality monitoring around schools and areas of high traffic such as Springfield stadium; and
- (b) the Island-wide project to monitor air quality, including the amount spent on this project and the role, if any, that Digital Jersey have had or continue to have in its development?”

Answer

a) The current air quality monitoring undertaken by Natural Environment includes:

- Reference automatic NO_x analyser sited at Jersey Market measuring real time Nitrogen Dioxide (NO₂) from traffic emissions on Beresford Street.
- Two Osiris particulate analysers (sensors) sited at Jersey Market measuring particulate matter (TSP, PM₁₀, PM_{2.5} & PM₁) from traffic emissions on Beresford Street (roadside) and a further unit at Howard Davis Park measuring the same from predominantly non-traffic emissions (background).
- Diffusion tubes – 23 NO₂ tubes and 5 Volatile Organic Carbon (VOC) tubes around the Island which measure cumulative emissions over the course of a month. These are located at various locations including schools and areas of significant traffic.

b) Air quality monitoring development programme progress:

- The development of an indicative sensor network. Trials of sensor technology have been undertaken during 2022 by co-locating the units with the reference analyser at Beresford Street. The trials have been independently reviewed with a view to informing the procurement of approximately 10-20 sensor units which will be located in due course at key sites to be determined (in conjunction with stakeholders). All new sensors require a period of co-location with the reference analyser prior to deployment. Further units are currently being procured.
- The calibrated units from the trial are currently deployed at Rouge Bouillion, Wellington Hill and St Luke’s School to support other projects. The former two sites are sited to support some mobile air quality monitoring we plan to do before the end of the school summer term.
- Given the indicative nature of the data produced by sensor technology (i.e. the level of accuracy that sensors can achieve), how the data is provided to the public is at the early stages of development and requires further research of equivalent programmes elsewhere and discussion with key stakeholders (including Health colleagues, Digital Jersey and suppliers).
- We are looking to consolidate existing reference analysers at a new site, which will include the procurement of a reference analyser for particulate matter. This will enable us to benchmark and calibrate all low-cost sensors in a far more efficient manner and provide flexibility for the programme moving forward.

Digital Jersey is involved as a stakeholder in the project and will be more involved as we look to develop the public-facing elements of the programme. Costs of £9,848 to date have been limited to trial-related work. However, we are starting to procure further equipment and support as described above, so costs will increase significantly over the coming months.