

Accuracy and reliability of Chile's National Air Quality Information System for measuring particulate matter: Beta attenuation monitoring issue

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© 2015 Elsevier Ltd. A critical analysis of Chile's National Air Quality Information System (NAQIS) is presented, focusing on particulate matter (PM) measurement. This paper examines the complexity, availability and reliability of monitoring station information, the implementation of control systems, the quality assurance protocols of the monitoring station data and the reliability of the measurement systems in areas highly polluted by particulate matter. From information available on the NAQIS website, it is possible to confirm that the PM_{2.5} (PM₁₀) data available on the site correspond to 30.8% (69.2%) of the total information available from the monitoring stations. There is a lack of information regarding the measurement systems used to quantify air pollutants, most of the available data registers contain gaps, almost all of the information is categorized as "preliminary information" and neither standard operating procedures (operational and validation) nor assurance audits or quali