

## Adoption of Noise and Vibration Management Tools for Major Infrastructure Projects in Sydney, Australia

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**Abstract :** Minimizing construction noise and vibration impacts is a key challenge for major infrastructure projects in urban environments. Before commencing construction works, Construction Noise and Vibration Management Plan (CNVMP) and Construction Noise and Vibration Impact Statements (CNVIS) are required to be prepared and submitted to the relevant government authorities for review and approval. However, the assessment of potential impacts from work activities at pre-approval stage may be inaccurate as works methodology and scheduling are yet to be determined. In response, noise and vibration management tools have been developed to refine and supplement the CNVIS as works progress. These tools have been successfully implemented in major infrastructure projects allowing contractors to plan and assess construction works in a cost effective and timely manner. As a result, noise and vibration management tools have been incorporated into management plans and are increasingly required by regulators.

**Keywords :** noise management, environmental noise, infrastructure projects, construction, vibration, cost effective

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