
BAPE-4.4

Référence:

4. Le climat sonore

Demande ou Question:

- 4.4 Dans le rapport principal de l'étude d'impact, au tableau 5.4-13, expliquez l'impact sonore au point A-2 ?

Réponse:

Table 5.4-13 is a summary of the potential for impact for each VEC. In the case of noise, this is for each receptor location. The noise impact at location A2 from table 5.4-13 is explained below according to the table columns.

Direction : Is the project going to increase or decrease existing noise levels?

The potential is for increased noise therefore the direction of impact for A-2 is negative. Decreased noise would be positive and no change would be neutral.

Magnitude : How much impact could changes in noise levels have?

The overall rating for location A-2 was High due to the L_{Amax} indicator (See table 5.4-9, column *Overall VEC Magnitude*). Moderate magnitude changes were also identified for the other indicators, particularly for MDDEP criteria (See table 5.4-9, column *Criteria VEC Magnitude*).

Three criteria were used to determine the overall magnitude of the project effects on the environment: MENV criteria (now MDDEP), human response to changes in equivalent noise levels and HUD criteria. MENV criteria focused on values calculated by a specific methodology. Human response to changes in equivalent noise levels were a direct comparison of predicted equivalent noise levels with the quietest ambient (baseline) measured values. The criteria for the L_{Amax} indicator were based on a graph of annoyance from sound levels versus duration of the sound. Below are the maximum acceptable values allowed for events occurring 1 % of the time.

< 68 dBA = clearly acceptable

< 79 dBA = normal

BAPE-4.4

< 90 dBA = normally unacceptable

> 90 dBA = clearly unacceptable.

Section 5.4.1.5 explains the qualifications used for each criteria described above in each scenario to determine level of impact.

Geographic Extent : Where does the impact occur?

For location A-2, the noise effects are rated local, meaning they all occur within the acoustic environment study area as defined in section 5 Figure 5.1.1.

Duration : How long will the impacts last?

Duration of an impact is usually defined by project phase. In the case of receptor location A-2, the impacts may occur for the duration of construction activity, except for the L_{Amax} impacts which would only occur during blasting. Blasting is scheduled to occur over a 3 month period. The second part of the statement in this column of Table 5.4-13, « *MENV exceeding 1 dBA during the nighttime* », refers to the loudest predicted hour over the entire 12 hour nighttime period. It indicates that during the periods of highest activity, the 12 hour period noise levels are expected to remain below the MDDEP criteria, but the potential exists of an occasional hour to exceed the night time MDDEP criteria. This could occur at any time during project construction.

Frequency : How often will the impacts occur?

This relates to frequency of occurrence. Note that the modelling took into account the worst case scenario. This includes maximum numbers for equipment, operating all day and operating at maximum capacity. Since construction activity is variable, this parameter was rated medium for location A-2. The blasting impacts will occur once per day for three months. Other impacts are much more difficult to predict, but are not expected to occur continuously.

For further information on the methodology used for the environmental impact assessment, please refer to section 4 of the EIS.