BAB 2
Chapter 2

Pengawasan Bunyi Bising
Noise Monitoring

BAB 2 / *CHAPTER 2*
PENGAWASAN BUNYI BISING AMBIEN
AMBIENT NOISE MONITORING

PENGAWASAN BUNYI BISING AMBIEN
AMBIENT NOISE MONITORING

Pada tahun 2015, Jabatan Alam Sekitar (JAS) meneruskan pelaksanaan program pengawasan bunyi bising ambien di 3 jenis penerimaan gunatanah yang berbeza iaitu kawasan sensitif bunyi bising, trafik dan industri seperti yang ditunjukkan dalam **Jadual 2.1**.

*In 2015, the Department of Environment (DOE) continue to conduct the ambient noise monitoring programme at three different types of receiving land use namely noise sensitive areas, traffic and industrial as shown in **Table 2.1**.*

Jadual 2.1 : Kategori Guna Tanah
Table 2.1 : Categories of Land Use

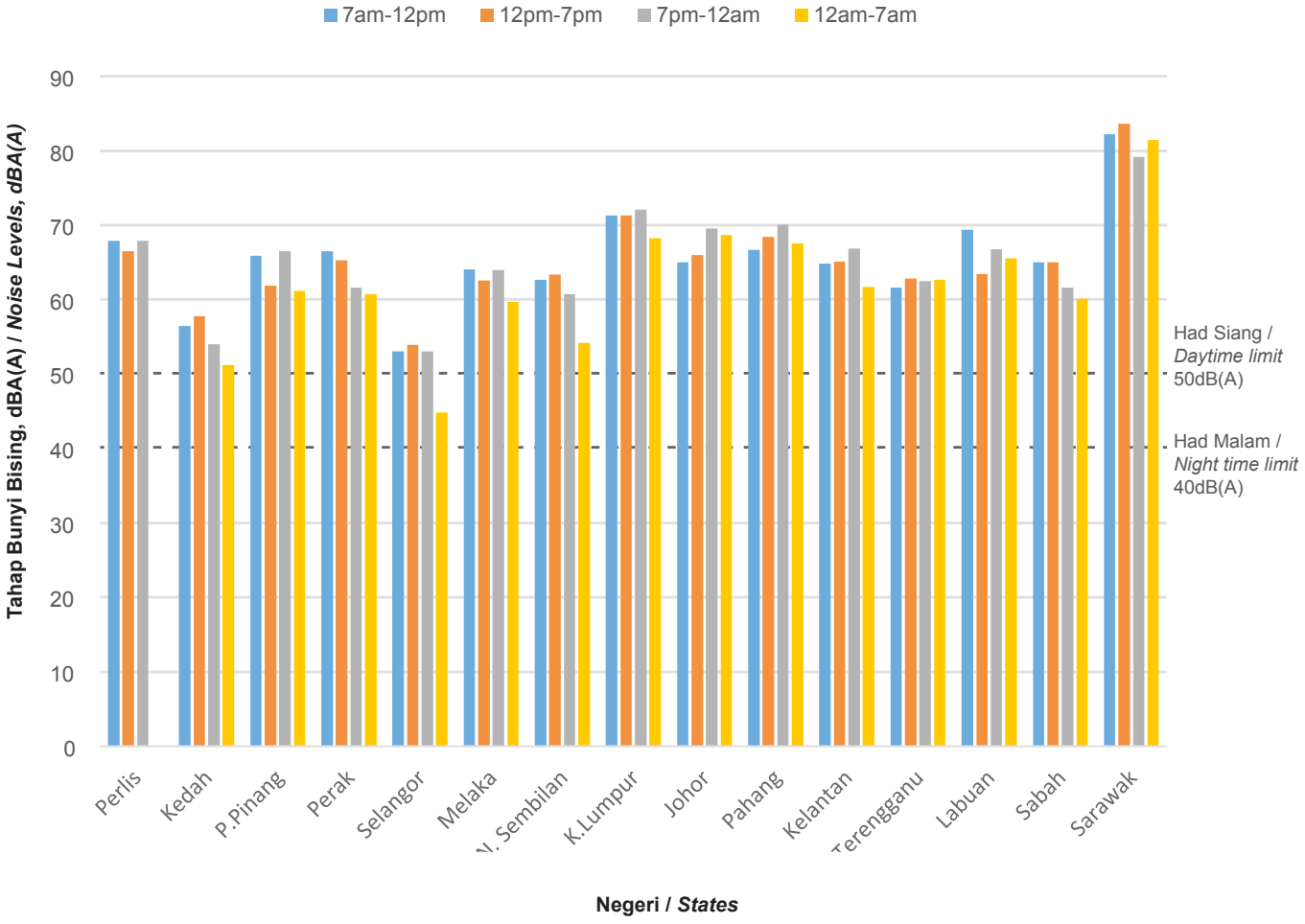
KATEGORI *CATEGORIES*	LOKASI *LOCATION*
Sensitif Bunyi Bising *Noise Sensitive*	Sekolah *School*
	Hospital *Hospital*
	Tempat Keagamaan *Place of Worship*
	Lapangan Terbang *Airport*
Trafik *Traffic*	Lebuhraya *Highway*
	Jalan Persekutuan *Federal Road*
	Jalan Luar Bandar *Suburban Road*
Industri *Industrial*	Industri Berat *Heavy Industry*
	Industri Sederhana *Medium Industry*
	Industri Kecil *Small Industry*

Bagi tujuan pengawasan, 60 minit sampel bunyi bising diukur bagi empat (4) tempoh masa sepanjang hari. Pengukuran tersebut dilaksanakan oleh JAS Negeri. Data yang dikumpul daripada program ini akan memberi manfaat sebagai data asas untuk tujuan perancangan dan pembangunan peraturan bunyi bising pada masa hadapan. Data bunyi bising dicatatkan semasa program pengawasan dan perbandingan dibuat dengan Garis Panduan Perancangan Untuk Had Dan Kawalan Bunyi Bising Persekitaran, 2004 yang diterbitkan oleh Jabatan Alam Sekitar.

For monitoring purposes, a 60 minutes sample on noise level were measured during four (4) period of the day. DOE states offices carried out the measurements. The data collected from this programme would be beneficial as a baseline data for planning purposes and the development of regulations for noise in the future. The noise data recorded during the monitoring programme and comparison were made with The Planning Guidelines for Environmental Noise Limits and Control, 2004 published by Department of Environment.

Rajah 2.1 menunjukkan perbandingan tahap bunyi bising di kawasan sensitif iaitu di sekolah, masjid, lapangan terbang dan hospital. Pada tahun 2015, semua pengawasan di kawasan ini melebihi had waktu siang iaitu 50 dB(A) dan had waktu malam iaitu 40 dB(A) kerana aktiviti penduduk setempat di sekitar kawasan itu. Bacaan tertinggi iaitu 84 dB(A) dicatatkan di Sarawak antara 12.00 tengahari hingga 7 pm. Bacaan terendah iaitu 45 dB(A) dicatatkan di Selangor antara 12.00 am hingga 7.00 am.

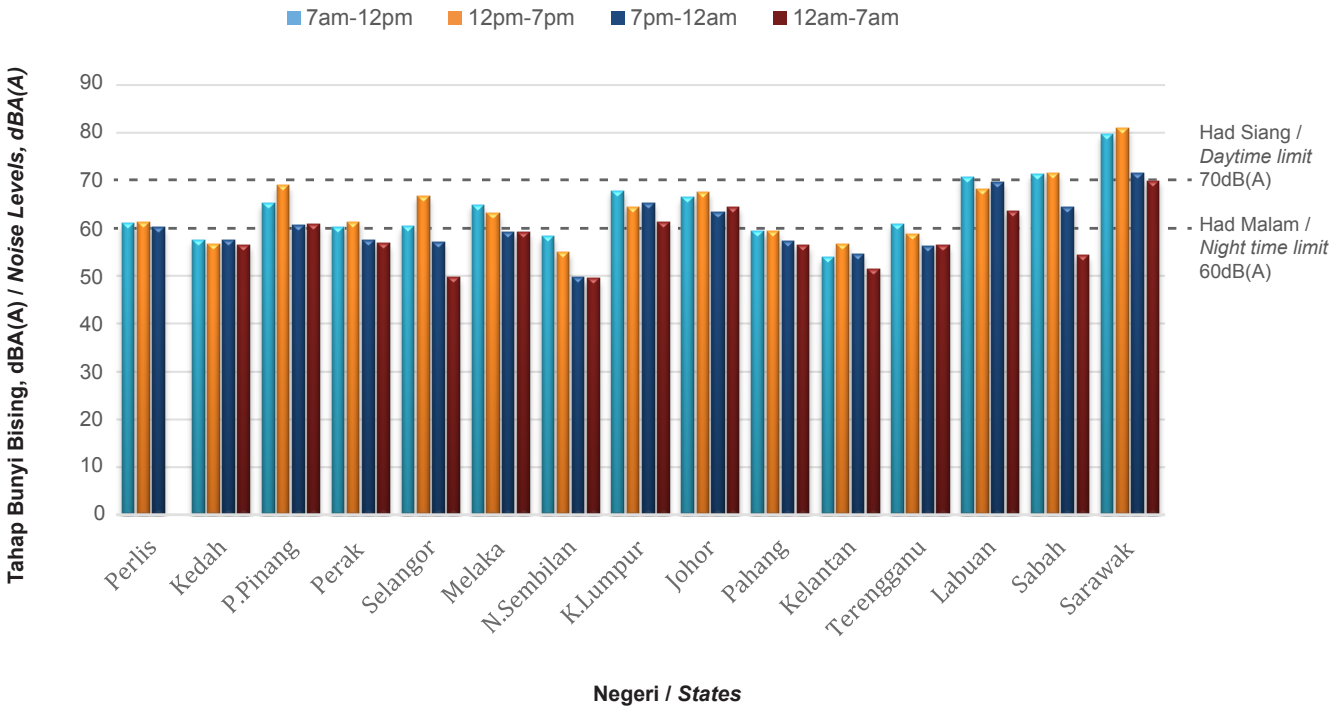
Figure 2.1 *shows a comparison of noise levels in sensitive areas such as school, mosque, airport and hospital. In 2015, all the monitoring in this area exceeded the daytime limit of 50 dB(A) and night time limit of 40 dB(A) due to human activities in surrounding area. The highest reading of 84 dB(A) was recorded in Sarawak between 12.00 noon to 7.00 pm. The lowest reading of 45 dB(A) was recorded in Selangor between 12.00 am to 7.00 am.*



Rajah 2.1 : Perbandingan Tahap Bunyi Bising di Kawasan Sensitif Mengikut Negeri
Figure 2.1 : Comparison of Noise Levels for Noise Sensitive Areas in Various States

Rajah 2.2 menunjukkan perbandingan tahap bacaan bunyi bising di kawasan industri yang merangkumi 3 jenis kawasan industri iaitu industri berat, industri sederhana dan industri kecil. Di dapati bacaan tertinggi di waktu siang dicatatkan di Sarawak dengan bacaan 81 dB(A) di antara 12.00 pm hingga 7.00 pm. Bacaan terendah di waktu malam yang dicatatkan adalah di Negeri Sembilan dengan bacaan 50 dB(A) di antara 7.00 pm hingga 7.00 am.

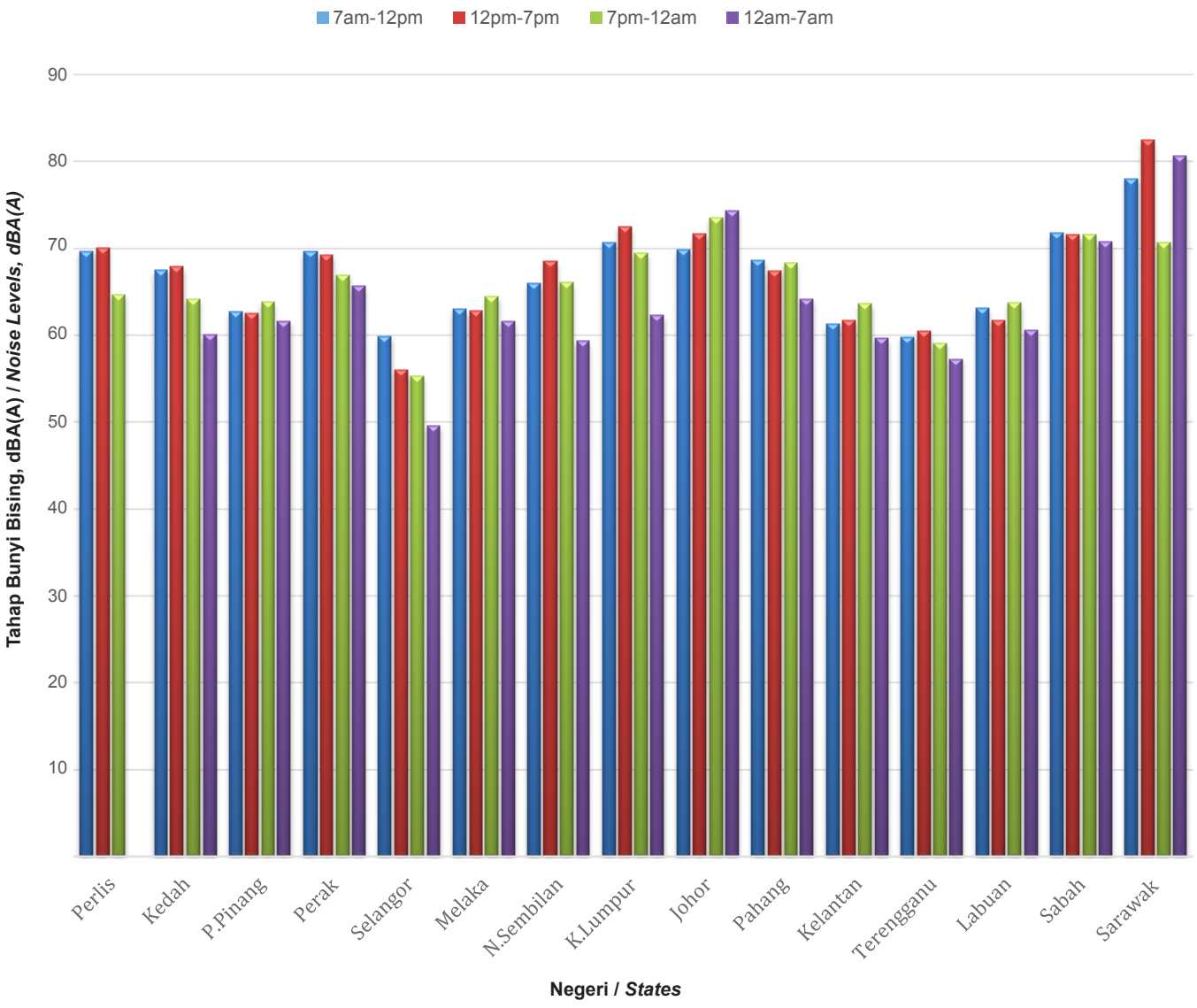
Figure 2.2 *shows a comparison of noise levels in industrial areas. The areas comprised 3 locations types such as heavy industry, medium industry and small industry. It was found that the highest reading was recorded in Sarawak with 81 dB(A) between 12.00 pm to 7.00 pm. The lowest reading recorded was in Negeri Sembilan with 50 dB(A) between 7.00 pm to 7.00 am.*



Rajah 2.2 : Perbandingan Tahap Bunyi Bising di Kawasan Perindustrian Mengikut Negeri
Figure 2.2 : Comparison of Noise Levels for Industrial Area in Various States

Rajah 2.3 menunjukkan perbandingan tahap bunyi bising di pelbagai kawasan trafik seperti lebuh raya, jalan persekutuan dan jalan luar bandar. Tahap bunyi bising di lokasi-lokasi ini adalah di antara 56 dB(A) hingga 82 dB(A) bagi pemantauan pada waktu siang manakala pemantauan pada waktu malam mencatatkan bacaan antara 50 dB(A) hingga 81 dB(A). Ia juga menunjukkan bahawa bacaan pengawasan pada waktu siang mencatatkan bacaan yang hampir sama dengan waktu malam berkemungkinan disebabkan lebih tinggi berbanding pengawasan pada waktu malam. Ini mungkin disebabkan bilangan kenderaan bermotor yang semakin bertambah di jalan raya pada waktu malam.

***Figure 2.3** shows a comparison of noise level in various traffic areas such as highway, federal road and suburban road. The noise levels in these locations ranged between 56 dB(A) to 82 dB(A) during the day time monitoring while night time monitoring recorded reading between 50 dB(A) to 81 dB(A). It also showed that daytime monitoring recorded more or less equal to nighttime readings. This may be due to the increasing number of motor vehicles on the road during nighttime.*



Rajah 2.3 : Perbandingan Tahap Bunyi Bising bagi Trafik Mengikut Negeri
Figure 2.3 : Comparison of Noise Levels for Traffic Mode in Various States