

Hong Kong, 18 September 2014

Panel on Economic Development and Panel on Environmental Affairs  
Legislative Council Secretariat  
Legislative Council Complex  
1 Legislative Council Road  
Central, Hong Kong

Dear Chairman and Members,

### **Compensate and mitigate residents who suffer excessive noise events**

#### **Demand Statutory Aircraft Noise Monitoring and Enforcement System before approving the Third Runway Project, Hong Kong International Airport**

Legislators should demand a statutory Aircraft Noise Monitoring and Enforcement system, including enforcement action to be taken when aircraft break agreed noise limits. Excessive noise events should result in penalties for the airport, and through them the airlines involved.

Secondly, the proposed mitigation measures under the EIA are insufficient. Taking NEF as the noise evaluation standard does not reflect the actual situation. NEF is the average noise received both daytime and night-time period. On this basis, compensation and mitigation is only offered for a few households in villages along the Lantau coast.

However, recordings by the CAD show that Tung Chung, Ma Wan, Tsing Yi, Tsuen Wan and other areas suffer regular excessive noise events, despite the fact that these areas are beyond the 2011 NEF contours identified in the EIA. This information was absent from the EIA report prepared by the airport. With the 3<sup>rd</sup> runway and as flights increase, Tung Chung, Ma Wan, Tsing Yi, Tsuen Wan, Tuen Mun, Sham Tseng, and Gold Coast will suffer regular excessive noise events.

A Noise Action Plan such as implemented by Heathrow Airport<sup>1</sup> should be considered as a condition for any approval of the airport expansion, and compensation and mitigation measures should be offered to all who suffer excessive aircraft noise events, not just those who are living within the average noise contours identified academically for the EIA.

Finally, the New Airport Master Plan EIA (in 1992) by the Hong Kong Airport Authority (HKAA) proposed to review the Noise Exposure Forecast (NEF) contour every 5 years. However, HKAA has never started any review claiming that the maximum capacity for which it received its environmental permit was never met. The EIA is thus incomplete in protecting residents from excessive noise with mitigation or otherwise compensation measures. A statutory Aircraft Monitoring System and Enforcement system is required so that the Civil Aviation Department (CAD) can review measures based on the actual noise data collected from its noise monitoring stations.

Finally we note that the average noise contours identified in the 3<sup>rd</sup> Runway EIA report are optimistic and ignore the impact on Ma Wan and other residential areas near the flight paths. For the proposed Aircraft Noise Monitoring and Enforcement system, the CAD and HKAA should adopt update noise monitoring standards like Ldn, DNL, Leq or Lnight rather than the conservative NEF system currently used for the EIA.

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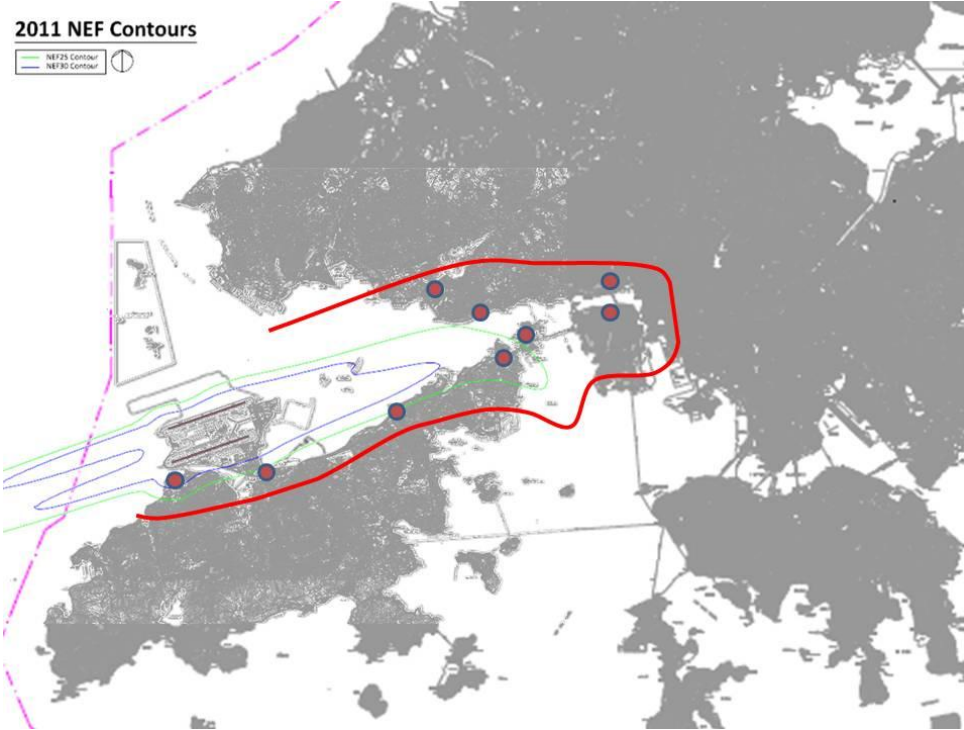
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<sup>1</sup> [http://www.heathrowairport.com/static/Heathrow\\_Noise/Downloads/PDF/NAP\\_main.pdf](http://www.heathrowairport.com/static/Heathrow_Noise/Downloads/PDF/NAP_main.pdf)

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## 2011 NEF Contours

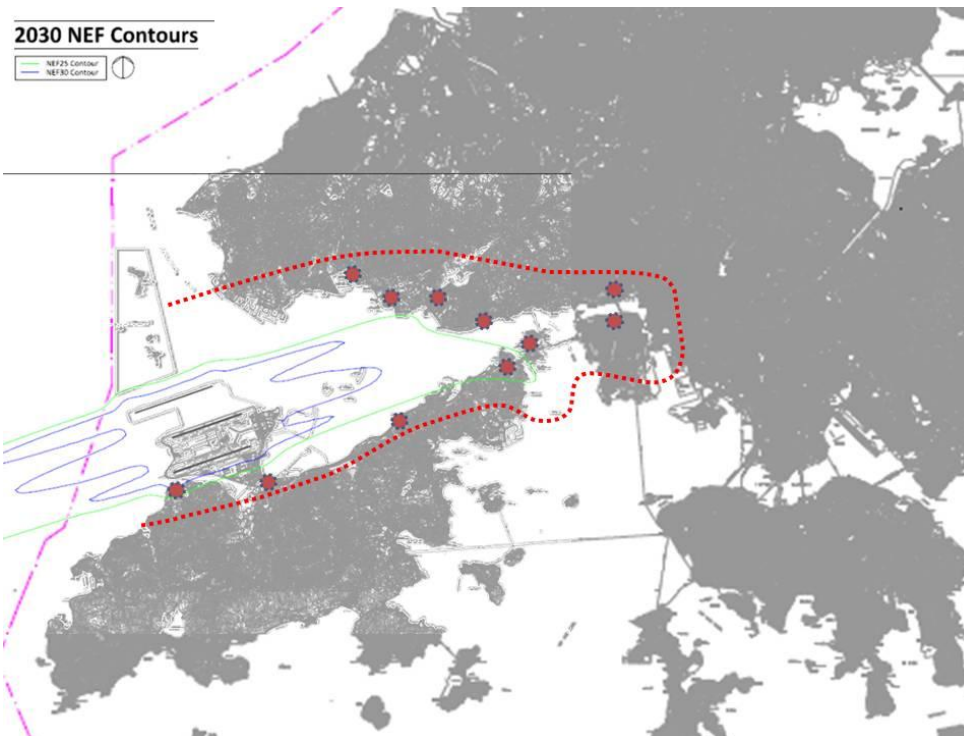
NEF25 Contour  
NEF50 Contour



Red dots indicating places that suffer from regular excessive aircraft noise events in 2011 according to CAD data provided to the Legislative Council on 29 May 2013. The green and blue lines indicate the average noise contours according to the NEF method under the EIA.

## 2030 NEF Contours

NEF25 Contour  
NEF50 Contour



Red dots indicating places which are expected to suffer from regular excessive aircraft noise events in 2030 from modeling the CAD data on excessive noise events, and the change in NEF contours (green and blue lines) with the completion of the 3<sup>rd</sup> runway.

**Noise Events Recorded by the Noise Monitoring Terminals in 2013 and 2014 (up to April)**  
**(during 2300 hours to 0700 hours the following day)**

| <i>Noise Monitoring Terminal</i>                        | <i>Noise Level (dB)</i> | <i>2013</i> |            |            |            |            |            |            |            |            |            |            |            | <i>2014</i> |            |            |            |
|---|-------------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|
|   |                         | <i>Jan</i>  | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> | <i>May</i> | <i>Jun</i> | <i>Jul</i> | <i>Aug</i> | <i>Sep</i> | <i>Oct</i> | <i>Nov</i> | <i>Dec</i> | <i>Jan</i>  | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> |
| 1. Mei Lam Estate,<br>Tai Wai                           | 70 - 74                 | 0           | 0          | 1          | 0          | 5          | 3          | 2          | 5          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
|   | 75 - 79                 | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 4          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
|   | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
| 2. On Yam Estate,<br>Kwai Chung                         | 70 - 74                 | 0           | 2          | 3          | 6          | 38         | 44         | 47         | 54         | 3          | 1          | 0          | 0          | 0           | 0          | 1          | 0          |
|   | 75 - 79                 | 0           | 0          | 0          | 0          | 2          | 0          | 0          | 2          | 1          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
|   | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
| 3. Yiu Tung Estate,<br>Shau Kei Wan                     | 70 - 74                 | 0           | 0          | 4          | 7          | 0          | 1          | 7          | 1          | 2          | 1          | 0          | 1          | 0           | 0          | 1          | 1          |
|   | 75 - 79                 | 0           | 0          | 0          | 1          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
|   | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
| 4. Beverley Heights,<br>Cloud View Road,<br>North Point | 70 - 74                 | 0           | 0          | 6          | 7          | 0          | 1          | 7          | 6          | 0          | 0          | 1          | 2          | 0           | 0          | 1          | 2          |
|   | 75 - 79                 | 0           | 0          | 1          | 1          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 1          | 0          |
|   | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 1          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |

**Noise Events Recorded by the Noise Monitoring Terminals in 2013 and 2014 (up to April)**  
**(during 2300 hours to 0700 hours the following day)**

| <i>Noise Monitoring Terminal</i>                    | <i>Noise Level (dB)</i> | <i>2013</i> |            |            |            |            |            |            |            |            |            |            |            | <i>2014</i> |            |            |            |
|---|-------------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|
|   |                         | <i>Jan</i>  | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> | <i>May</i> | <i>Jun</i> | <i>Jul</i> | <i>Aug</i> | <i>Sep</i> | <i>Oct</i> | <i>Nov</i> | <i>Dec</i> | <i>Jan</i>  | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> |
| 5. Fairmont Gardens,<br>Conduit Road,<br>Mid-Levels | 70 - 74                 | 0           | 0          | 0          | 0          | 1          | 0          | 0          | 2          | 1          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
|   | 75 - 79                 | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
|   | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
| 6. Hong Kong Garden,<br>Tsing Lung Tau              | 70 - 74                 | 240         | 127        | 201        | 217        | 347        | 506        | 262        | 418        | 154        | 115        | 171        | 182        | 199         | 108        | 188        | 119        |
|   | 75 - 79                 | 41          | 19         | 26         | 14         | 17         | 30         | 14         | 39         | 11         | 11         | 12         | 22         | 19          | 12         | 33         | 9          |
|   | ≥80                     | 2           | 1          | 1          | 1          | 3          | 3          | 2          | 1          | 0          | 2          | 0          | 0          | 1           | 0          | 2          | 0          |
| 7. Sha Lo Wan, Lantau<br><br>(Note 1)               | 70 - 74                 | 251         | 382        | 378        | 418        | 366        | 283        | 335        | 406        | 416        | 368        | —          | —          | —           | —          | —          | 134        |
|   | 75 - 79                 | 41          | 60         | 82         | 75         | 43         | 41         | 46         | 82         | 66         | 54         | —          | —          | —           | —          | —          | 18         |
|   | ≥80                     | 7           | 11         | 6          | 6          | 8          | 0          | 7          | 5          | 5          | 5          | —          | —          | —           | —          | —          | 0          |
| 8. Caribbean Coast,<br>Tung Chung                   | 70 - 74                 | 287         | 159        | 200        | 133        | 48         | 56         | 61         | 67         | 99         | 90         | 170        | 176        | 206         | 126        | 71         | 81         |
|   | 75 - 79                 | 7           | 10         | 9          | 12         | 4          | 4          | 5          | 13         | 15         | 4          | 23         | 3          | 15          | 29         | 4          | 20         |
|   | ≥80                     | 0           | 1          | 0          | 0          | 1          | 0          | 0          | 3          | 2          | 0          | 1          | 0          | 1           | 0          | 0          | 0          |

Note 1: No noise data was collected between 25 October 2013 and 7 April 2014 at the noise monitoring terminal in Sha Lo Wan due to equipment outage.

**Noise Events Recorded by the Noise Monitoring Terminals in 2013 and 2014 (up to April)**  
**(during 2300 hours to 0700 hours the following day)**

| <i>Noise Monitoring Terminal</i>                               | <i>Noise Level (dB)</i> | <i>2013</i> |            |            |            |            |            |            |            |            |            |            |            | <i>2014</i> |            |            |            |
|--|-------------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|
|  |                         | <i>Jan</i>  | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> | <i>May</i> | <i>Jun</i> | <i>Jul</i> | <i>Aug</i> | <i>Sep</i> | <i>Oct</i> | <i>Nov</i> | <i>Dec</i> | <i>Jan</i>  | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> |
| 9. Ma Wan Marine Control Centre, Ting Kau                      | 70 - 74                 | 13          | 5          | 19         | 40         | 195        | 306        | 108        | 274        | 50         | 4          | 10         | 9          | 15          | 1          | 33         | 22         |
|  | 75 - 79                 | 1           | 0          | 2          | 0          | 8          | 5          | 3          | 4          | 1          | 0          | 0          | 2          | 1           | 1          | 0          | 0          |
|  | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
| 10. Park Island, Ma Wan  | 70 - 74                 | 709         | 421        | 639        | 582        | 555        | 515        | 666        | 543        | 488        | 515        | 468        | 588        | 577         | 401        | 544        | 403        |
|  | 75 - 79                 | 164         | 73         | 106        | 116        | 106        | 94         | 125        | 86         | 80         | 77         | 107        | 132        | 105         | 70         | 164        | 84         |
|  | ≥80                     | 20          | 13         | 16         | 10         | 8          | 6          | 3          | 7          | 6          | 9          | 10         | 14         | 10          | 10         | 30         | 6          |
| 11. Tai Lam Chung Tsuen<br><i>(Note 2)</i>                     | 70 - 74                 | 18          | 14         | 8          | 6          | 6          | 2          | 2          | 2          | 1          | 2          | —          | 12         | 10          | 23         | 35         | 9          |
|  | 75 - 79                 | 0           | 0          | 1          | 1          | 0          | 0          | 0          | 0          | 0          | 0          | —          | 0          | 3           | 1          | 4          | 0          |
|  | ≥80                     | 1           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | —          | 0          | 0           | 0          | 0          | 0          |
| 12. Greenview Court, Yau Kom Tau, Tsuen Wan<br><i>(Note 3)</i> | 70 - 74                 | 0           | 0          | 5          | 6          | 34         | 81         | 34         | 14         | 27         | 3          | 0          | 0          | 0           | 0          | —          | 10         |
|  | 75 - 79                 | 0           | 0          | 0          | 0          | 1          | 1          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | —          | 0          |
|  | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | —          | 0          |

Note 2: No noise data was collected between 13 November 2013 and 9 December 2013 at the noise monitoring terminal in Tai Lam Chung Tsuen due to equipment outage.

Note 3: No noise data was collected between 5 March 2014 and 26 March 2014 at the noise monitoring terminal in Greenview Court due to equipment outage.

**Noise Events Recorded by the Noise Monitoring Terminals in 2013 and 2014 (up to April)**  
**(during 2300 hours to 0700 hours the following day)**

| <i>Noise Monitoring Terminal</i>                          | <i>Noise Level (dB)</i> | <i>2013</i> |            |            |            |            |            |            |            |            |            |            |            | <i>2014</i> |            |            |            |
|---|-------------------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|
|   |                         | <i>Jan</i>  | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> | <i>May</i> | <i>Jun</i> | <i>Jul</i> | <i>Aug</i> | <i>Sep</i> | <i>Oct</i> | <i>Nov</i> | <i>Dec</i> | <i>Jan</i>  | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> |
| 13. Cheung Hang Estate, Tsing Yi                          | 70 - 74                 | 0           | 3          | 10         | 17         | 97         | 119        | 111        | 102        | 6          | 3          | 0          | 0          | 0           | 0          | 2          | 0          |
|   | 75 - 79                 | 0           | 0          | 1          | 0          | 2          | 4          | 1          | 5          | 5          | 3          | 0          | 0          | 0           | 0          | 0          | 0          |
|   | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 2          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
| 14. Siu Ho Wan MTRC Depot, Sunny Bay                      | 70 - 74                 | 625         | 348        | 547        | 408        | 283        | 212        | 302        | 269        | 325        | 346        | 351        | 369        | 383         | 285        | 250        | 206        |
|   | 75 - 79                 | 36          | 23         | 31         | 24         | 10         | 6          | 18         | 11         | 25         | 21         | 20         | 26         | 7           | 14         | 16         | 17         |
|   | ≥80                     | 1           | 1          | 1          | 0          | 0          | 0          | 0          | 1          | 0          | 0          | 0          | 1          | 0           | 1          | 0          | 0          |
| 15. Mount Butler Road, Jardine's Lookout                  | 70 - 74                 | 0           | 0          | 0          | 1          | 0          | 1          | 2          | 7          | 2          | 0          | 1          | 0          | 0           | 0          | 2          | 6          |
|   | 75 - 79                 | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 3          | 1          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
|   | ≥80                     | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          |
| 16. Mount Haven, Liu To Road, Tsing Yi<br><i>(Note 4)</i> | 70 - 74                 | 0           | 1          | 8          | 8          | 15         | 14         | 31         | 30         | 5          | —          | —          | —          | —           | —          | —          | —          |
|   | 75 - 79                 | 0           | 1          | 0          | 1          | 0          | 1          | 3          | 2          | 0          | —          | —          | —          | —           | —          | —          | —          |
|   | ≥80                     | 0           | 0          | 1          | 0          | 0          | 0          | 0          | 1          | 0          | —          | —          | —          | —           | —          | —          | —          |

Note 4: No noise data was collected between 26 September 2013 and 18 December 2013 as well as from 5 January 2014 onwards at the noise monitoring terminal in Mount Haven due to equipment outage.