

2012

**Report on
Air and Noise
Pollution Monitoring
in
Seven Urban Centres of
Gilgit-Baltistan**



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1. INTRODUCTION

Gilgit-Baltistan Environmental Protection Agency (GB-EPA) aimed to carry out air and noise pollution studies in seven urban centres of Gilgit-Baltistan i.e. Ghanche, Skardu, Gilgit, Diamer, Ghizer, Astore and Hunza Nagar. Air quality monitoring survey is conducted from various sources in Gilgit-Baltistan. The rationale is to investigate the level of pollution in air and noise levels at existing settings.

The collected baseline information will be used to plan remediation necessary to mitigate its impact on surrounding environment. The assessment will not only identify potential contaminants and their probable sources but will also help in devising the reduction strategy. This report documents the finding of the air and noise survey conducted at technically selected locations of Gilgit-Baltistan region.

1.3. PROJECT BACKGROUND

GB-EPA through funding from Gilgit-Baltistan ADP started a project titled “Strengthening of Laboratory and Baseline Studies for Environmental Parameters in GB”. The project has three major components; Solid Waste Studies, Air and Noise Pollution Monitoring and Drinking and Wastewater Surveys in GB. This study was conducted within the scope of the project under the head “Air and Noise Pollution Monitoring in Urban Centres of GB”.

1.4. OBJECTIVE

The objective of the study is to:

- ◆ Determine air quality and noise in seven urban centres of Gilgit-Baltistan region.
- ◆ Identify potential sources of pollution inline with Pak-EPA National Environmental Quality Standards (NEQS) notified by Ministry of Environment.

1.5. SCOPE

Following is the scope of services;

- ◆ Noise level monitoring at selected locations
- ◆ Comparison of data with National Environmental Quality Standards (NEQS).

- ◆ Ambient Air Quality monitoring at selected locations on Pak-EPA NEQS Standard parameters like NO₂, SO₂, CO and PM₁₀.
- ◆ Comparison of obtained data with Pak-EPA NEQS.
- ◆ Vehicular Emission Monitoring according to Pak-EPA NEQS for noise, CO and smoke.
- ◆ Comparison of obtained data with NEQS.

1.6. PROJECT LOCATION

Gilgit-Baltistan is a mountainous region with unique high altitude ecosystem covered by high mountains and glaciers, pastures, forest and water resources. Due to the conditions the region has very fragile ecosystem and is under stress due to increasing anthropogenic activities. Ambient and Indoor Air Quality is deteriorating day-by-day due to influx of Non Custom Paid Vehicles (NCP), burning of Fossil Fuels during winters for heating and cooking and over exploiting of natural resources.

Gilgit-Baltistan province is administratively divided into seven districts i.e. Ghanche, Skardu, Gilgit, Diamer, Ghizer, Astore and Hunza-Nagar with its administrative centre located in the town of Gilgit. Gilgit-Baltistan covers an area of 72,971 km² (28,174 mi²) with an estimated population approaching 1,000,000.

1.6.1. MONITORING LOCATIONS

The sites selected for the ambient air quality, PM10, Noise and hydrocarbons sampling and analysis are as follows:

- ◆ Airport Chowk Gilgit
- ◆ Ittehad Chowk Gilgit
- ◆ Hospital Chowk Gilgit
- ◆ Khomar Chowk Gilgit
- ◆ Ali Abad Bazar Hunza-Nagar
- ◆ Gahkuch Bazar Ghizer
- ◆ Khaplu Bazar Ghanche
- ◆ Yadgar Chowk Skardu
- ◆ Pareshan Chowk Skardu
- ◆ Hospital Chowk Skardu
- ◆ Astore Bazar (Astore)
- ◆ Chilas Bazar Chilas

1.6.2. VEHICULAR EMISSION MONITORING

Vehicular emission monitoring for noise, CO and smoke was conducted on 102 numbers of vehicles across Gilgit-Baltistan; details of vehicles are given at **Annexure 8**.

2. METHODOLOGY

Following is the brief description of methodology adopted for this project.

2.1. MONITORING PLAN

On the basis of identified sampling locations a monitoring plan was developed in order to obtain representative data on the required environmental parameters. Air samples for the assessment of Hydrocarbons, SO₂, NO₂ were collected from the identified sites and dispatched to SGS Environmental Laboratory for analysis while monitoring of CO and noise was conducted on site. Emissions from the vehicles for the estimation of CO, noise and smoke was carried out on site utilizing vehicular emission analyzer. The plan developed for field survey and sampling is presented in **Table 2.1**. The collected samples were preserved and labeled with their source identified before dispatching to SGS Environmental Laboratory Lahore.

Table 2.1: Survey and Monitoring Plan

#	Activity	Duration														
		July, 2010											Aug., 2010			
		19	20	21	22	23	24	25	26	27	28	29	30	31	01	02
1	Weather Monitoring															
1.1	Air Port Chowk Gilgit	■														
1.2	Ittehad Chowk Garhi Bagh Gilgit		■													
1.3	Hospital Chowk Gilgit			■												
1.4	Khomar Chowk Gilgit					■										
1.5	Ali Abad Bazar Hunza							■								
1.6	Gahkuch Bazar Ghizer								■							
1.7	Khaplu Bazar Ghanche									■						
1.8	Yadgar Chowk Skardu										■					
1.9	Pareshan Chowk Skardu											■				
1.10	Hospital Chowk Skardu												■			

#	Activity	Duration														
		July, 2010											Aug., 2010			
		19	20	21	22	23	24	25	26	27	28	29	30	31	01	02
1.11	Astore Bazar Astore															
1.12	Chilas Bazar Chilas															
2	Ambient Air Quality Monitoring (CO, SOx,NO2)															
2.1	Air Port Chowk Gilgit															
2.2	Ittehad Chowk Garhi Bagh Gilgit															
2.3	Hospital Chowk Gilgit															
2.4	Khomar Chowk Gilgit															
2.5	Ali Abad Bazar Hunza															
2.6	Gahkuch Bazar Ghizer															
2.7	Khaplu Bazar Ghanche															
2.8	Yadgar Chowk Skardu															
2.9	Pareshan Chowk Skardu															
2.10	Hospital Chowk Skardu															
2.11	Astore Bazar Astore															
2.12	Chilas Bazar Chilas															
3	Particulate Matter Sampling and Analysis															
3.1	Air Port Chowk Gilgit															
3.2	Ittehad Chowk Garhi Bagh Gilgit															
3.3	Hospital Chowk Gilgit															
3.4	Khomar Chowk Gilgit															
3.5	Ali Abad Bazar Hunza															
3.6	Gahkuch Bazar Ghizer															
3.7	Khaplu Bazar Ghanche															
3.8	Yadgar Chowk Skardu															
3.9	Pareshan Chowk Skardu															
3.10	Hospital Chowk Skardu															

#	Activity	Duration															
		July, 2010											Aug., 2010				
		19	20	21	22	23	24	25	26	27	28	29	30	31	01	02	03
3.11	Astore Bazar Astore																
3.12	Chilas Bazar Chilas																
4	Noise Level Monitoring																
4.1	Air Port Chowk Gilgit																
4.2	Ittehad Chowk Garhi Bagh Gilgit																
4.3	Hospital Chowk Gilgit																
4.4	Cinema Chowk Gilgit																
4.5	Public Chowk Gilgit																
4.6	Khomar Chowk Gilgit																
4.7	Ali Abad Bazar Hunza																
4.8	Gahkuch Bazar Ghizer																
4.9	Khaplu Bazar Ghanche																
4.10	Yadgar Chowk Skardu																
4.11	Pareshan Chowk Skardu																
4.12	Hospital Chowk Skardu																
4.13	Astore Bazar Astore																
4.14	Chilas Bazar Chilas																
5	Vehicular Emission Monitoring																
5.1	Air Port Chowk Gilgit																
5.2	Ittehad Chowk Garhi Bagh Gilgit																
5.3	Hospital Chowk Gilgit																
5.4	Khomar Chowk Gilgit																
5.5	Ali Abad Bazar Hunza																
5.6	Gahkuch Bazar Ghizer																
5.7	Khaplu Bazar Ghanche																
5.8	Yadgar Chowk Skardu																

#	Activity	Duration														
		July, 2010											Aug., 2010			
		19	20	21	22	23	24	25	26	27	28	29	30	31	01	02
5.9	Pareshan Chowk Skardu															
5.10	Hospital Chowk Skardu															
5.11	Astore Bazar Astore															
5.12	Chilas Bazar Chilas															

Table 2.2: Methodology of Ambient Air Quality Monitoring

Air Pollutant	Monitoring Technique	Method	Measurement Range	Lowest Detection Limit
Carbon monoxide (CO)	Automatic Potable Analyzer	40 CFR 50, App. C (US-EPA)	1 – 100 ppm	1 ppm
Sulfur Dioxide (SO₂)	Calorimetric Improved West & Gaeke (Sod. Tetrachloro Mercurate) Method	40 CFR 50, App. A (US-EPA)	0.01– 0.4 ppm 25 µg/m ³ to 1000 µg/m ³	0.01 ppm
Nitrogen Dioxide (NO₂)	Griess Saltzman Method	ISO 6768	0.01– 0.4 ppm 25 µg/m ³ to 1000 µg/m ³	0.01 ppm
Particulate Matter (PM₁₀)	High Volume PM ₁₀ Sampler	40 CFR 50, App. J (US-EPA)	2 – 750 µg/m ³	2 µg/m ³
Hydrocarbon (HC)	Sampling through sorbent tube , Gas Chromatography	US EPA 8260	-	5 ppm

3. MONITORING RESULTS

This section of the report presents the discussion on test results obtained during ambient air quality monitoring, PM₁₀, vehicular emission monitoring, noise, and hydrocarbons sampling and analysis.

3.1. AMBIENT AIR QUALITY

Concentration of CO, NO₂ and SO₂ was measured at 12 sampling points at selected locations of Gilgit-Baltistan consecutively to get an overview of the air quality. Pollutants were monitored for 8 continuous hours and its mean was calculated for each day of intervention. The results of measured concentrations at each sampling location are given in Annexure-3 of the report. Pak-EPA standards for ambient air quality are given as **Table 3.1**. These standards limit the concentrations of the ambient air primary pollutants to certain concentration that becomes less disruptive to environment. Health and Environmental Impacts of Air Pollutants are detailed in Annex-8.

Table 3.1: Pak-EPA National Ambient Air Quality Standards

Pollutants	Time-weighted average	Concentration in Ambient Air	
		Effective from 1 st January 2009	Effective from 1 st January 2012
Sulphur Dioxide (SO ₂)	Annual Average*	80 µg/m ³	80 µg/m ³
	24 hours**	120 µg/m ³	120 µg/m ³
Oxides of Nitrogen as (NO ₂)	Annual Average*	40 µg/m ³	40 µg/m ³
	24 hours**	80 µg/m ³	80 µg/m ³
Respirable Particulate Matter PM ₁₀	Annual Average*	200 µg/m ³	120 µg/m ³
	24 hours**	250 µg/m ³	150 µg/m ³
Carbon Monoxide (CO)	8 hours **	5 mg/m ³	5 mg/m ³
	1 hour	10 mg/m ³	10 mg/m ³

* Annual arithmetic mean of minimum 104 measurements in a year taken twice a week 24 hourly at uniform interval.

** 24 hourly / 8 hourly values should be met 98% of the in a year. 2% of the time, it may exceed but not on two consecutive days.

3.1.1. CARBON MONOXIDE (CO)

The concentration of CO in the air was monitored for 8 hours at each selected location. The results indicate that minimum CO was 0.47 mg/m³, on 8 hour average basis, at Khomar Chowk Gilgit; whereas it was found highest at 1.45 mg/m³ on Chilas Bazar. The remaining CO read outs are found between these figures; which are less than the criteria of primary limit

of 5 mg/m^3 (8-hour averaging time) as defined by Pak-EPA in its National Environmental Quality Standards for Ambient Air.

Hourly averages for the CO concentration are given in **Annexure 3** of the report while the results of 8 hour average at each location are plotted in **Figure 3.1**. The graph indicate that the CO concentration lies well below the limits defined as 5 mg/m^3 (8 hr averaging time) of Pak-EPA National Environmental Quality Standards (NEQS).

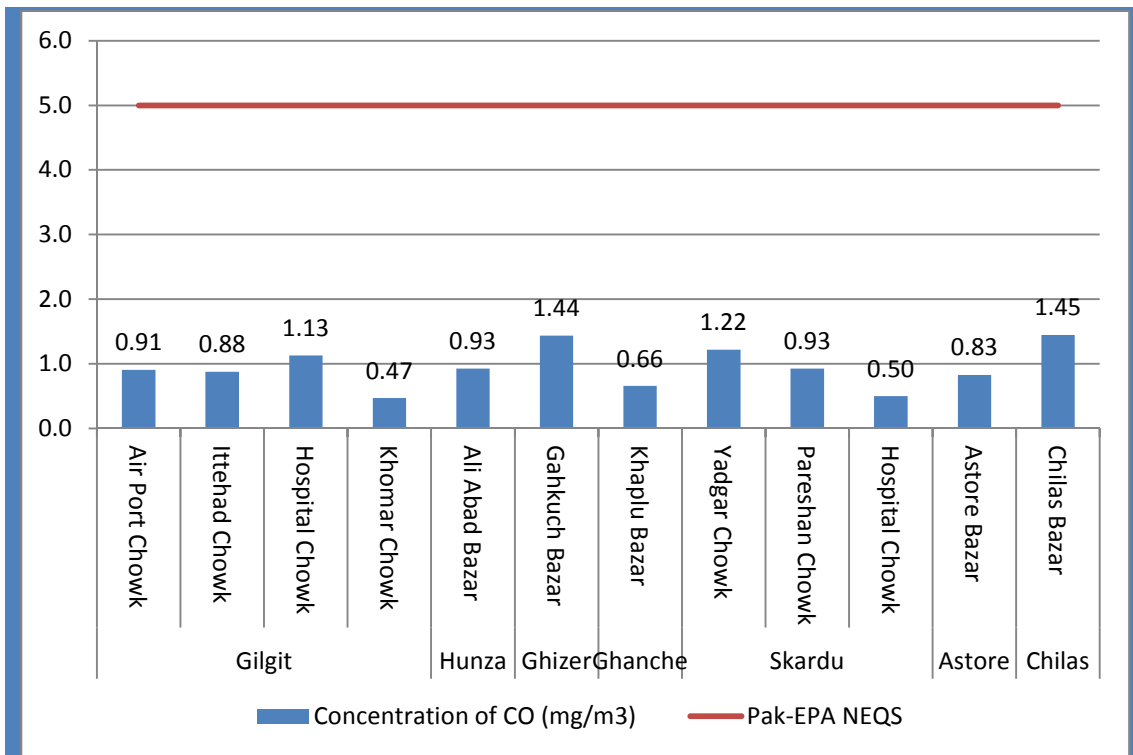


Figure 3.1: Average Concentration of CO (mg/m³)

3.1.2. OXIDES OF NITROGEN (NO₂)

The concentration of NO₂ in the air was monitored for 8 hours at each selected location of Gilgit. The results of hourly concentration are given as **Annexure 3** of the report. NO₂ is ranging from $380 \text{ } \mu\text{g/m}^3$ minimum at Khomar Chowk till maximum of $1320 \text{ } \mu\text{g/m}^3$ at Aliabad Bazar Hunza, over 8 hour averaging time. These figures indicate that remaining NO_x read outs are ranging between these figures and all the values were exceeding the limits defined in Pak-EPA NEQS for ambient air quality. The standard value for 24hrs average for NO₂ is $80 \text{ } \mu\text{g/m}^3$ according to Pak-EPA NEQS. The graph showing average concentration of NO₂ at various locations of Gilgit is included as **Figure 3.2**.

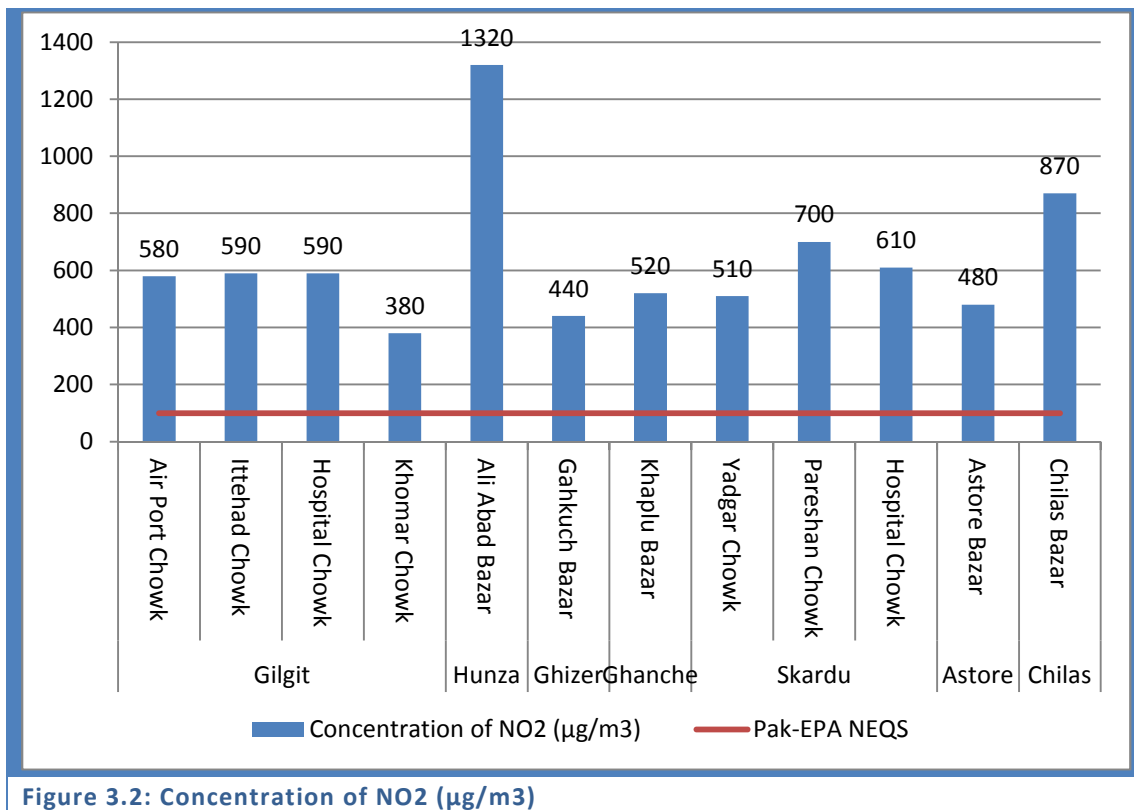


Figure 3.2: Concentration of NO₂ (µg/m³)

It is anticipated that higher value of oxides of Nitrogen are resulted due to Elevated temperature in the combustion device such as engines and furnaces from anthropogenic activities. As the area is mostly comprised of valleys and mountains so, road traffic in such areas results in high concentrations of pollutants in the ambient air. The topographic and meteorological conditions of valleys slow down the dispersion of air pollutants, thus increasing the concentration and harmful effects of pollutant emissions. Secondly weather condition during monitoring was cloudy which may also be the reason for higher concentration of NO₂ levels. As GB has higher percentage of vehicles with respect to population and absorptive capacity of the region due to Non-Custom Paid Vehicles so a NO_x level are higher and has detrimental impacts on human health and environment.

It was decided to repeat sampling for NO₂ during winters to verify and improve the reliability of the results.

3.1.3. SULPHUR DIOXIDE (SO₂)

Concentration of SO₂ with 8 hr average was found <25 µg/m³ at selected monitoring sites and the figures indicate that SO₂ read outs are quite less than the criteria of primary limit as defined by Pak-EPA in its National Environmental Quality Standards for Ambient Air. The results of average hourly concentration are included as **Annexure 3** of the report, the standard value as per Pak-EPA NEQS for 24 hr average concentration of SO₂ is 120 µg/m³.

Levels of SO₂ for 8 hr average are observed to be less than the standard value for 24 hr average.

3.1.4. PARTICULATE MATTER (PM₁₀)

The PM₁₀ monitoring was conducted at 12 selected locations of Gilgit. To obtain the hourly concentration of PM₁₀ (particles with diameters of 10 micrometers or less) at advised locations, a high volume PM₁₀ sampler was installed for 8 hours at each site. Average concentrations of PM₁₀ at Gilgit along with the monitoring dates are appended in **Annexure 4** of the report. The results of PM₁₀ monitoring with 8 hrs averaging time are summarized in **Figure 3.3** to get an overview of the ambient air quality. PM₁₀ Monitoring trend at 12 referred locations show variation in concentration of PM₁₀ from 88.95 to 238.64 µg/m³. The minimum average PM₁₀ level was registered 88.95 µg/m³ at Airport Chowk Gilgit; whereas it was found highest 238.64 µg/m³ at Ali Abad Bazar Hunza. According to Pak-EPA NEQS the standard value for PM₁₀ for 24 hr average should not exceed from 250 µg/m³. 24 hr average for PM₁₀ mentioned in the standard includes 10 hr of night time when the activities producing PM₁₀ are less likely. The PM₁₀ concentration is less than 250µg/m³ at all the monitoring locations as shown in **Figure 3.3**.

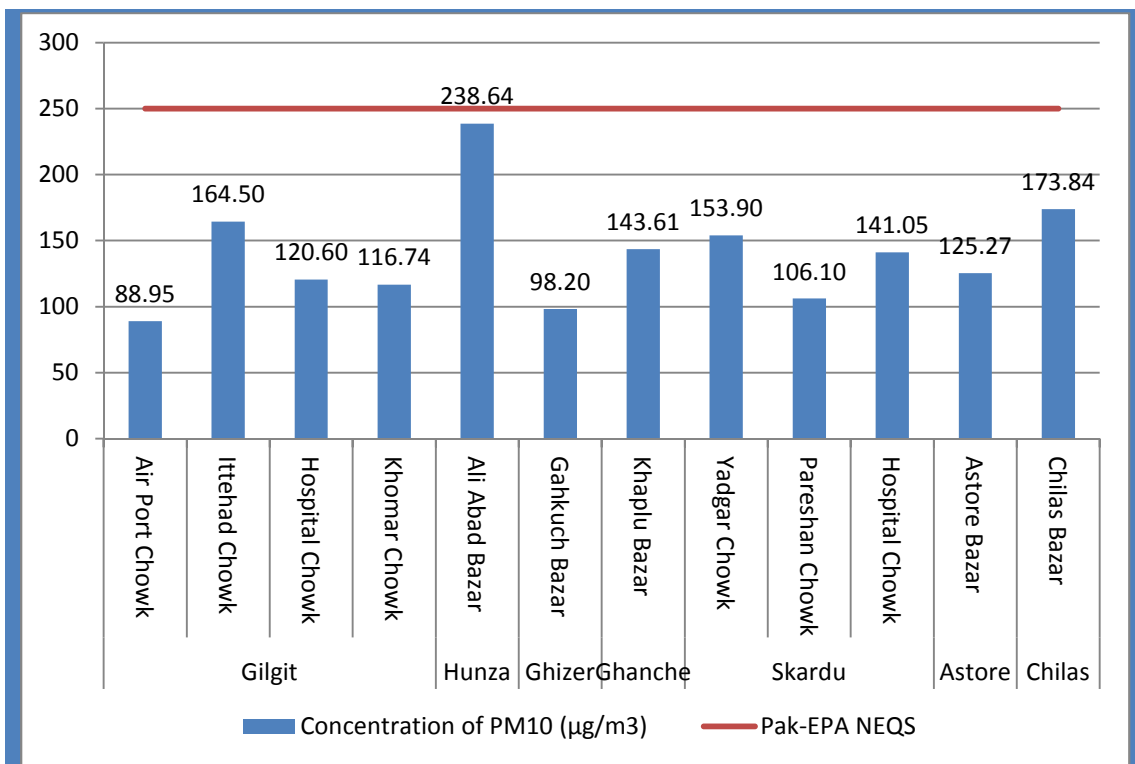


Figure 3.3: Concentration of PM₁₀ (µg/m³)

3.1.5. HYDROCARBONS

Hydrocarbon sampling in ambient air was carried out at 12 sampling locations selected technically by GB-EPA. Concentration of hydrocarbons in air was found to be less than 5 ppm in all samples which is considered to be minimal. The results are included in **Annexure 5** of the report.

3.2. NOISE

Noise pollution is considered an important matrix in addition to other pollutants existing in Air, Aquatic and Soil System of environment; and is accounted for its offensive impacts particularly on sensitive regions relating to human and other terrestrial organisms. The noise levels were determined at the 14 identified locations of Gilgit-Baltistan. Monitoring was carried out for 8 hours at each site with an averaging time of one hour and the results of survey are included in **Annexure 6** of the report. Results vary in noise levels from 67.5 dB at Airport Chowk Gilgit to 76.6 dB at Cinema Chowk Gilgit with an 8 hrs averaging time. According to Pak-EPA NEQS for noise, sound level should not exceed from 65 dB (A) in residential area, 70 dB (A) in the commercial area, 80 dB (A) in industrial and 55 dB (A) in silence zone during day time. Similarly it should not exceed 50 dB (A) in residential area, 60 dB (A) in commercial area, 75 dB (A) In industrial area and 45dB (A) in Silence zone, during night time. As the monitoring was carried out during day time and monitoring sites were located in commercial areas where noise levels are relatively higher, the results exceed Pak-EPA NEQS limits for commercial area at twelve locations and are being met at two (02) out of 14 prevailing locations. **Figure 3.4** gives an average of noise levels at each location.

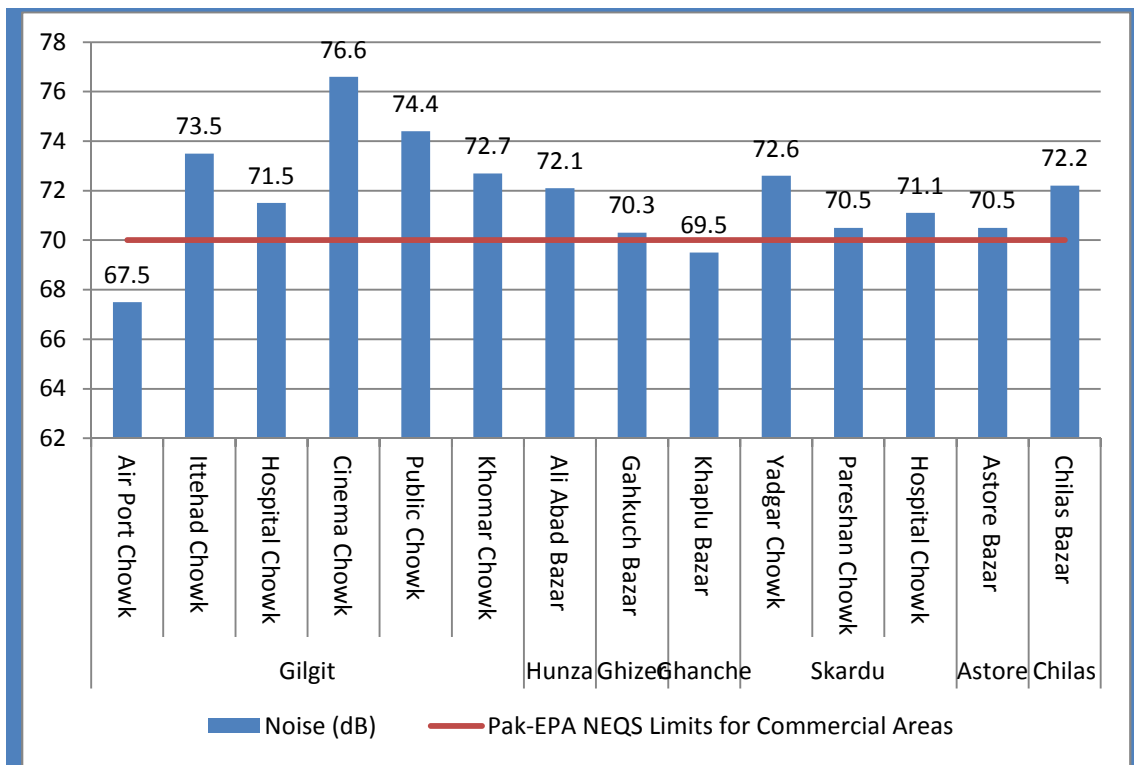


Figure 3.4: Average Noise Levels (dB)

It is anticipated that the higher level of noise is due to equipment and construction machinery, use of pressure horns and movement of other transport on the monitoring sites.

3.3. VEHICULAR EMISSION MONITORING

Vehicular Emission Monitoring was conducted at advised locations of GB-EPA. A total of 102 vehicles were selected for monitoring. Monitoring results were attached as **Annexure 7** of the report. Results of vehicular emission monitoring were compared with Pak-EPA NEQS for motor vehicle exhaust and noise. Results of all parameters were found very well within the limits specified in NEQS except that smoke of 34 vehicles out of 102 exceeds the limits defined in NEQS.

ANNEXURES

ANNEXURE 1: PHOTOGRAPHS



Hydrocarbon and PM₁₀ Measurement in Ambient Air at Airport Chowk



Hydrocarbon and PM₁₀ in Ambient Air at Ittehad Chowk



Noise Level Monitoring at Hospital Chowk



PM₁₀ and HC Sampling at Ittehad Chowk



Noise Level Monitoring at Ittehad Chowk



Noise Level Monitoring at Ittehad Chowk



PM₁₀ and HC Sampling at Ittehad Chowk

ANNEXURE 2: METEOROLOGICAL DATA**Sampling Point: Air Port Chowk Gilgit****Date of Intervention: July 19, 2010**

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
10:00	33	S	4.5	17
11:00	35	W	1.3	16
12:00	36	NW	1.8	14
13:00	38	W	1.8	12
14:00	39	NW	2.2	13
15:00	39	W	3.1	17
16:00	36	W	7.6	16
17:00	35	NW	7.6	16

Sampling Point: Ittehad Chowk Garhi Bagh Gilgit**Date of Intervention: July 20, 2010**

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
10:00	31	E	6.3	30
11:00	33	E	5.8	24
12:00	32	E	4.5	29
13:00	38	E	4.5	19
14:00	37	W	5.4	21
15:00	39	W	4	19
16:00	36	W	1.8	29
17:00	32	W	8.5	29

Sampling Point: Hospital Chowk Gilgit

Date of Intervention: July 21, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
10:00	32	S	4	26
11:00	26	S	0.4	53
12:00	26	S	0.4	58
13:00	26	W	1.8	58
14:00	26	SE	1.8	61
15:00	25	SE	0.4	63
16:00	23	SW	0.9	73
17:00	23	W	1.8	68

Sampling Point: Hospital Chowk Gilgit

Date of Intervention: July 21, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
10:00	22	W	2.2	70
11:00	25	W	2.7	56
12:00	27	W	3.1	49
13:00	27	W	4.5	45
14:00	28	W	3.1	42
15:00	28	W	3.1	42
16:00	28	W	2.7	40
17:00	29	W	3.2	42

Sampling Point: Ali Abad Bazar Hunza

Date of Intervention: July 25, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
9:00	22	W	2.2	42
10:00	23	SE	1.3	37
11:00	25	SE	0.9	41
12:00	29	E	3.1	29
13:00	31	E	2.2	31
14:00	32	E	5.8	23
15:00	33	NE	2.9	21
16:00	34	NE	3.3	20

Sampling Point: Gahkuch Bazar Ghizer

Date of Intervention: July 26, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
9:00	27	S	0.3	35
10:00	30	S	0.4	28
11:00	32	S	1.2	25
12:00	34	SE	0.9	22
13:00	36	W	0.8	21
14:00	37	SW	0.9	14
15:00	37	SW	0.4	13
16:00	37	SW	0.7	15

Sampling Point: Khaplu Bazar Ghanche

Date of Intervention: July 28, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
9:00	24	NE	1.8	47
10:00	26	NE	2.2	42
11:00	28	NE	1.7	40
12:00	29	NE	2.3	35
13:00	32	NW	2.9	30
14:00	33	NW	1.6	28
15:00	33	NW	0.9	22
16:00	32	NW	1.3	24

Sampling Point: Yadgar Chowk Skardu

Date of Intervention: July 29, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
9:00	20	E	0.7	68
10:00	21	SE	0.9	65
11:00	23	E	1.3	56
12:00	24	SE	1.8	54
13:00	21	SE	1.8	77
14:00	22	SE	0.9	76
15:00	22	SE	1.6	75
16:00	21	E	1.2	76

Sampling Point: Pareshan Chowk Skardu

Date of Intervention: July 30, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
9:00	17	E	2.1	80
10:00	17	E	1.7	80
11:00	18	E	1.3	81
12:00	19	SE	2.2	80
13:00	19	SE	0.9	82
14:00	19	E	0.4	82
15:00	18	E	2.2	81
16:00	18	E	1.6	81

Sampling Point: Hospital Chowk Skardu

Date of Intervention: July 31, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
9:00	18	E	1.2	74
10:00	18	E	0.9	74
11:00	19	E	0.4	76
12:00	19	E	0.9	79
13:00	22	S	1.8	73
14:00	24	E	2.2	72
15:00	24	E	2.1	72
16:00	23	E	1.9	73

Sampling Point: Astore Bazar (Astore)

Date of Intervention: August 02, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
9:00	22	N	3.2	53
10:00	25	N	1.2	46
11:00	27	N	1.8	40
12:00	28	N	1.8	38
13:00	29	N	2.3	36
14:00	30	N	1.7	35
15:00	28	N	2.5	38
16:00	27	N	3.1	40

Sampling Point: Chilas Bazar Chilas

Date of Intervention: August 03, 2010

Time	Temp (°C)	Wind Direction	Wind Speed (m/s)	Humidity (%)
9:00	29	NE	3.1	42
10:00	31	E	4.2	40
11:00	34	NE	2.2	38
12:00	35	NE	2.9	37
13:00	37	NE	3.7	31
14:00	38	E	1.2	29
15:00	39	E	0.9	28
16:00	39	E	1.7	26

ANNEXURE 3: N/A

ANNEXURE 4: AMBIENT AIR QUALITY RESULTS FOR PARTICULATE MATTER (PM₁₀)

Sr.#	Monitoring Locations	Date (2010)	Duration	Average Concentrations Particulate Matter (µg/m ³)
1.	Airport Chowk Gilgit	July, 19	08 Hrs	88.95
2.	Itehad Chowk Garhi Bagh Gilgit	July, 20	08 Hrs	164.5
3.	Hospital Chowk Gilgit	July, 21	08 Hrs	120.6
4.	Khomar Chowk	July, 23	08 Hrs	116.74
5.	Ali Abad Bazar Hunza	July, 25	08 Hrs	238.64
6.	Gahkuch Bazar Ghizer	July, 26	08 Hrs	98.2
7.	Khaplu Bazar Ghanche	July, 28	08 Hrs	143.61
8.	Yadgar Chowk Skardu	July, 29	08 Hrs	153.9
9.	Pareshan Chowk Skardu	July, 30	08 Hrs	106.1
10.	Hospital Chowk Skardu	July, 31	08 Hrs	141.05
11.	Astore Bazar Astore	August, 02	08 Hrs	125.27
12.	Chilas Bazar Chilas	August, 03	08 Hrs	173.84

ANNEXURE 5: MONITORING RESULTS FOR HYDROCARBON IN AMBIENT AIR

Sr. #	Sample Collection Date	Sampling Location	Parameters	Unit	Test Results
1.	19-07-10	Airport Chowk Gilgit	Total Petroleum Hydrocarbon	ppm	< 5
2.	20-07-10	Itehad Chowk GariBagh Gilgit			< 5
3.	21-07-10	Hospital Chowk Gilgit			< 5
4.	23-07-10	Khomar Chowk, Gilgit			< 5
5.	25-07-10	Ali Abad Bazar Hunza-Nagar			< 5
6.	26-07-10	Gahkuch Bazar Ghizer			< 5
7.	28-07-10	Khaplu Bazar Ghanche			< 5
8.	29-07-10	Yadgar Chowk Skardu			< 5
9.	30-07-10	Pareshan Chowk Skardu			< 5
10.	31-07-10	Hospital Chowk Skardu			< 5
11.	02-08-2010	Astore Bazar Astore			< 5
12.	03-08-2010	Chillas Bazar Chillas			< 5

ANNEXURE 6: NOISE LEVEL MONITORING RESULTS

Time (hrs)	Reading 01 (dB)	Reading 02 (dB)	Reading 03 (dB)	Average (dB)
Airport Chowk Gilgit (19-07-2010)				
10:00	68.5	77.6	54.7	66.93
11:00	65.6	76.3	53.7	65.2
12:00	69.1	79.1	55.4	67.87
13:00	70.4	80.4	58.1	69.63
14:00	69.5	81.2	52.2	67.63
15:00	68.1	78	53.1	66.4
16:00	70	79.8	54	67.93
17:00	71.2	80	55.1	68.77
Ittehad Chowk Garhi Bagh Gilgit (20-07-2010)				
10:00	71.6	87.8	62.4	73.93
11:00	72.4	85.7	63.2	73.77
12:00	73	88.6	63.8	75.13
13:00	72.1	82.4	62.1	72.2
14:00	71.5	84.9	61	72.47
15:00	70.4	85.7	64.8	73.63
16:00	73.3	84.1	63.3	73.57
17:00	72	86	62.2	73.4
Hospital Chowk Gilgit (21-07-2010)				
10:00	71.4	82.6	60	71.33
11:00	68.9	87.1	61.7	72.57
12:00	69.8	85.2	59.1	71.37
13:00	70.4	84.5	60.2	71.7
14:00	68.1	85.8	59.4	71.1
15:00	70	82.1	58.1	70.07
16:00	71.1	83	60.3	71.47
17:00	71.4	84.4	61.4	72.4
Cinema Chowk (21-07-2010)				
	75.1	87.7	67.1	76.63
Public Chowk (21-07-2010)				
	75.1	83.1	65.1	74.43

Time (hrs)	Reading 01 (dB)	Reading 02 (dB)	Reading 03 (dB)	Average (dB)
Khomar Chowk Gilgit (23-07-2010)				
10:00	73.5	88.9	60.1	74.17
11:00	71.5	81.1	59.1	70.57
12:00	73.9	88.8	58.3	73.67
13:00	72.1	80.5	61.4	71.33
14:00	71.7	82.4	60	71.37
15:00	76.9	87.8	58.9	74.53
16:00	74.6	83.7	60.2	72.83
17:00	73.8	85.5	59.4	72.9
Ali Abad Bazar Hunza (25-07-2010)				
9:00	73.6	88.2	62	74.6
10:00	71.9	82.9	55.7	70.17
11:00	73.4	93.6	56.4	74.47
12:00	71.8	84.7	61.1	72.53
13:00	70.9	83.1	60.3	71.43
14:00	71.3	89.1	56.2	72.2
15:00	69.5	81	60.9	70.47
16:00	70.2	82.7	59.3	70.73
Gahkuch Bazar Ghizer 26-07-2010)				
9:00	69.4	80.6	58.2	69.4
10:00	68.5	81.3	57.1	68.97
11:00	72.9	84.5	59.6	72.33
12:00	72.2	85.9	55.5	71.2
13:00	70.6	88.4	55.8	71.6
14:00	70.4	82.8	58.5	70.57
15:00	68.7	78.3	59.7	68.9
16:00	70.6	78.8	58.3	69.23
Khaplu Bazar Ghanche (28-07-2010)				
9:00	69.4	79.7	57.6	68.9
10:00	69.7	81.3	58.4	69.8
11:00	70.6	82.6	59.5	70.9
12:00	69.9	81.1	59.3	70.1
13:00	65.8	79.8	58.3	67.97
14:00	68.3	80	58.4	68.9
15:00	69.4	80.1	59	69.5
16:00	68.7	81.3	58.8	69.6

Time (hrs)	Reading 01 (dB)	Reading 02 (dB)	Reading 03 (dB)	Average (dB)
Yadgar Chowk Skardu (29-07-2010)				
9:00	74.6	82.7	65.9	74.4
10:00	74	88.5	64.9	75.8
11:00	75.2	83.6	68.3	75.7
12:00	64.1	80.8	53.3	66.07
13:00	68	80.3	54.4	67.57
14:00	74.2	81.6	62.1	72.63
15:00	73.1	82.9	63.8	73.27
16:00	74.6	85.1	65.7	75.13
Pareshan Chowk Skardu (30-07-2010)				
9:00	73.1	82.5	56.3	70.63
10:00	71.3	81.4	57.5	70.07
11:00	72.5	82.7	57.2	70.8
12:00	70.9	80.3	55.9	69.03
13:00	71.2	84.7	59.2	71.7
14:00	73.7	82.2	58.7	71.53
15:00	70.8	81.9	56.8	69.83
16:00	71.1	82	58.4	70.5
Hospital Chowk Skardu (31-07-2010)				
9:00	72.1	85.5	58.1	71.9
10:00	71.3	82.9	59.7	71.3
11:00	73.4	80.2	58.3	70.63
12:00	72.7	82.7	59.2	71.53
13:00	70.2	81.3	57.5	69.67
14:00	70.1	80.1	56.2	68.8
15:00	72.9	83.5	59.5	71.97
16:00	73.3	85.4	60	72.9
Astore Bazar Astore (02-08-2010)				
9:00	70.4	80.4	57.6	69.47
10:00	71.8	82.3	58	70.7
11:00	72.7	81.8	56.1	70.2
12:00	72.4	86.7	57.1	72.07
13:00	70.1	85.1	56.2	70.47
14:00	71.2	80	57	69.4
15:00	72.6	81.4	55.3	69.77
16:00	70.5	86.2	58.9	71.87

Time (hrs)	Reading 01 (dB)	Reading 02 (dB)	Reading 03 (dB)	Average (dB)
Chilas Bazar Chilas (03-08-2010)				
9:00	73.3	85.1	60	72.8
10:00	72.2	87.5	59.5	73.07
11:00	73.1	84.3	59.3	72.23
12:00	72.4	88.2	60.5	73.7
13:00	71.5	82.7	58.2	70.8
14:00	70.6	81.5	57.7	69.93
15:00	73.7	87.3	59.3	73.43
16:00	72.2	84.1	58.1	71.47

ANNEXURE 7: DETAILS OF VEHICLES TESTED FOR EXHAUST EMISSIONS**VEHICULAR EMISSION MONITORING CO EMISSIONS (%)**

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
1	Gilgit	Toyota Corola GLT 01-0440 (NCP)	1990	Diesel	21-Jul-10	0.22	0.23	0.22	New Vehicle 4.5% Used Vehicle 6.0%
2	Gilgit	Suzuki Bolan GAR 4306	2007	Petrol	21-Jul-10	1.21	1.22	1.22	New Vehicle 4.5% Used Vehicle 6.0%
3	Gilgit	Suzuki Potohar GLT 1632	1987	Diesel	21-Jul-10	0.19	0.20	0.20	New Vehicle 4.5% Used Vehicle 6.0%
4	Gilgit	Suzuki Pick Up GLT 9712	1986	Petrol	21-Jul-10	3.21	3.25	3.25	New Vehicle 4.5% Used Vehicle 6.0%
5	Gilgit	Army Vehicle Mitsubishi Double Cabin	2007	Diesel	21-Jul-10	0.05	0.06	0.06	New Vehicle 4.5% Used Vehicle 6.0%
6	Gilgit	Suzuki Jimmy GLT-C-52	2009	Petrol	21-Jul-10	1.29	1.28	1.28	New Vehicle 4.5% Used Vehicle 6.0%
7	Gilgit	Toyota Corolla SE Saloon PSM 1612	1996	Diesel	21-Jul-10	0.59	0.60	0.60	New Vehicle 4.5% Used Vehicle 6.0%
8	Gilgit	Suzuki Bolan IDM 4984	2004	Petrol	21-Jul-10	1.69	1.69	1.70	New Vehicle 4.5% Used Vehicle 6.0%

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
9	Gilgit	Toyota Corolla Wagi	2002	Petrol	21-Jul-10	1.78	1.79	1.80	New Vehicle 4.5% Used Vehicle 6.0%
10	Gilgit	Toyota Hiace	2009	Diesel	21-Jul-10	0.08	0.09	0.08	New Vehicle 4.5% Used Vehicle 6.0%
11	Gilgit	Toyota Corolla Prado Tx GLT-02-0014	2008	Diesel	21-Jul-10	0.19	0.20	0.20	New Vehicle 4.5% Used Vehicle 6.0%
12	Gilgit	Suzuki Bolan EA 1666 Karachi	2002	Petrol	21-Jul-10	2.01	2.02	2.03	New Vehicle 4.5% Used Vehicle 6.0%
13	Gilgit	Suzuki Pick Up GLT-A-3348	1991	Petrol	21-Jul-10	2.51	2.52	2.53	New Vehicle 4.5% Used Vehicle 6.0%
14	Gilgit	Suzuki Pick Up MA 6205	1992	Petrol	21-Jul-10	2.52	2.49	2.49	New Vehicle 4.5% Used Vehicle 6.0%
15	Gilgit	Suzuki Potohar GLT-A- 3422	1988	Petrol	21-Jul-10	2.79	2.81	2.81	New Vehicle 4.5% Used Vehicle 6.0%
16	Gilgit	Toyota Hiace Double Cabener Ghizer 543	1992	Diesel	21-Jul-10	0.21	0.22	0.23	New Vehicle 4.5% Used Vehicle 6.0%
17	Gilgit	Prado (NCP) Gilgit-02- 0402	1997	Diesel	21-Jul-10	0.31	0.32	0.33	New Vehicle 4.5% Used Vehicle 6.0%
18	Gilgit	Toyota Hiace NCP-DMR-74	1994	Diesel	21-Jul-10	0.59	0.60	0.60	New Vehicle 4.5% Used Vehicle 6.0%
19	Gilgit	Toyota 200 GLT 0842	1994	Diesel	21-Jul-10	0.51	0.49	0.42	New Vehicle 4.5% Used Vehicle 6.0%
20	Gilgit	Toyota Lx Limited Gilgit 01-1020	1998	Diesel	21-Jul-10	0.39	0.38	0.38	New Vehicle 4.5% Used Vehicle 6.0%

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
21	Gilgit	Hyundai Shehzore GLT B 174	2005	Diesel	21-Jul-10	0.11	0.12	0.12	New Vehicle 4.5% Used Vehicle 6.0%
22	Gilgit	Toyota Corolla 20D GLT-0058	1994	Diesel	21-Jul-10	0.16	0.17	0.17	New Vehicle 4.5% Used Vehicle 6.0%
23	Gilgit	Toyota Hiace GLT 5877	1988	Diesel	21-Jul-10	0.37	0.41	0.41	New Vehicle 4.5% Used Vehicle 6.0%
24	Gilgit	Land Rover GLT 6039	2004	Diesel	21-Jul-10	0.22	0.20	0.19	New Vehicle 4.5% Used Vehicle 6.0%
25	Gilgit	Suzuki Pick Up GLT 3718	1984	Petrol	21-Jul-10	2.99	2.98	2.98	New Vehicle 4.5% Used Vehicle 6.0%
26	Gilgit	Toyota Corola Wagi KM 126	1996	Diesel	21-Jul-10	0.53	0.54	0.55	New Vehicle 4.5% Used Vehicle 6.0%
27	Gilgit	Toyota Corola Gilgit-01-1480	1990	Diesel	21-Jul-10	0.49	0.48	0.48	New Vehicle 4.5% Used Vehicle 6.0%
28	Gilgit	Suzuki Jimmy BLTC 19	2007	Petrol	21-Jul-10	1.02	1.03	1.03	New Vehicle 4.5% Used Vehicle 6.0%
29	Hunza	Toyota Corola SE Saloon Gilgit 01-2301	1990	Diesel	25-Jul-10	0.63	0.65	0.65	New Vehicle 4.5% Used Vehicle 6.0%
30	Hunza	Massey Ferguson 240 GLTA 6622	1998	Diesel	25-Jul-10	0.51	0.51	0.53	New Vehicle 4.5% Used Vehicle 6.0%
31	Hunza	Toyota Pajero MNR 02-105	1995	Diesel	25-Jul-10	0.29	0.30	0.29	New Vehicle 4.5% Used Vehicle 6.0%
32	Hunza	Toyota Double Door MX-176	2008	Diesel	25-Jul-10	0.15	0.16	0.16	New Vehicle 4.5% Used Vehicle 6.0%

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
33	Hunza	Toyota Hiace BLN 2811	1984	Diesel	25-Jul-10	0.39	0.37	0.37	New Vehicle 4.5% Used Vehicle 6.0%
34	Hunza	Toyota Double Door GZR-1072	2007	Diesel	25-Jul-10	0.21	0.22	0.23	New Vehicle 4.5% Used Vehicle 6.0%
35	Hunza	Toyota Jeep GLT-A 1810	1975	Diesel	25-Jul-10	0.59	0.61	0.62	New Vehicle 4.5% Used Vehicle 6.0%
36	Hunza	Toyota Hiace NCP-GLT-04-276	1994	Diesel	25-Jul-10	0.35	0.36	0.39	New Vehicle 4.5% Used Vehicle 6.0%
37	Hunza	Toyota Hiace NCP-GLT-04-0342	1990	Diesel	25-Jul-10	0.42	0.42	0.44	New Vehicle 4.5% Used Vehicle 6.0%
38	Hunza	Suzuki Bolan AAB-1260	2000	Petrol	25-Jul-10	1.21	1.22	1.23	New Vehicle 4.5% Used Vehicle 6.0%
39	Hunza	Toyota Corolla NCP-01-2169	1988	Diesel	25-Jul-10	0.44	0.45	0.40	New Vehicle 4.5% Used Vehicle 6.0%
40	Hunza	Toyota Hilux Double Door KG-853	2008	Diesel	25-Jul-10	1.16	1.15	1.15	New Vehicle 4.5% Used Vehicle 6.0%
41	Ghizer	Toyota Corola Saloon GZR-01-2000	1996	Diesel	26-Jul-10	0.28	0.27	0.26	New Vehicle 4.5% Used Vehicle 6.0%
42	Ghizer	Massey Ferguson 240 GLT-2630	1990	Diesel	26-Jul-10	0.31	0.30	0.30	New Vehicle 4.5% Used Vehicle 6.0%
43	Ghizer	Toyota Wagi GLT NCP-01-1836	1996	Diesel	26-Jul-10	0.17	0.18	0.18	New Vehicle 4.5% Used Vehicle 6.0%
44	Ghizer	Toyota DadsunGZR-2020	1994	Diesel	26-Jul-10	0.20	0.19	0.19	New Vehicle 4.5% Used Vehicle 6.0%

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
45	Ghizer	Toyota Hiace GZR-04-0039	1972	Diesel	26-Jul-10	0.29	0.30	0.30	New Vehicle 4.5% Used Vehicle 6.0%
46	Ghizer	Suzuki Mehran PS-0399	2004	Petrol	26-Jul-10	1.09	1.10	1.10	New Vehicle 4.5% Used Vehicle 6.0%
47	Ghizer	Townace Pick Up GZR-01-0145	1990	Diesel	26-Jul-10	0.17	0.16	0.16	New Vehicle 4.5% Used Vehicle 6.0%
48	Ghizer	Suzuki Mehran IDL-1362	2006	Petrol	26-Jul-10	1.12	1.13	1.13	New Vehicle 4.5% Used Vehicle 6.0%
49	Ghizer	Hyundai Shehzore KP-2555	1992	Diesel	26-Jul-10	0.12	0.15	0.15	New Vehicle 4.5% Used Vehicle 6.0%
50	Ghizer	Toyota Hiace GLT-5804	1993	Diesel	26-Jul-10	0.19	0.20	0.20	New Vehicle 4.5% Used Vehicle 6.0%
51	Ghanche	Toyota Corrola MIA-1314	1982	Diesel	28-Jul-10	0.24	0.24	0.25	New Vehicle 4.5% Used Vehicle 6.0%
52	Ghanche	Toyota Jeep BLN-1456	1982	Diesel	28-Jul-10	0.21	0.22	0.22	New Vehicle 4.5% Used Vehicle 6.0%
53	Ghanche	Toyota Corrola NCP Khaplu-01-727	1990	Diesel	28-Jul-10	0.29	0.30	0.30	New Vehicle 4.5% Used Vehicle 6.0%
54	Ghanche	Suzuki FX BLN-2377	1984	Petrol	28-Jul-10	2.51	2.51	2.54	New Vehicle 4.5% Used Vehicle 6.0%
55	Ghanche	Suzuki Cuore NCP Sakardu-01-0755	2006	Petrol	28-Jul-10	1.91	1.92	1.93	New Vehicle 4.5% Used Vehicle 6.0%
56	Ghanche	Townace Pick Up NCP Khaplu-01-812	1992	Diesel	28-Jul-10	0.24	0.24	0.25	New Vehicle 4.5% Used Vehicle 6.0%

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
57	Ghanche	App Fou Massey Ferguson 240 (Tractor)	2009	Diesel	28-Jul-10	0.12	0.15	0.15	New Vehicle 4.5% Used Vehicle 6.0%
58	Ghanche	Toyota Mini Jeep AJK-B 4159	1985	Diesel	28-Jul-10	0.29	0.31	0.31	New Vehicle 4.5% Used Vehicle 6.0%
59	Ghanche	Toyota Corrola N-6126	1982	Diesel	28-Jul-10	0.32	0.35	0.35	New Vehicle 4.5% Used Vehicle 6.0%
60	Ghanche	Toyota Wagi NCP-KHP 01-0104	1996	Diesel	28-Jul-10	0.21	0.24	0.24	New Vehicle 4.5% Used Vehicle 6.0%
61	Skardu	Toyota Corrola LX-4093	1973	Diesel	29-Jul-10	0.61	0.61	0.62	New Vehicle 4.5% Used Vehicle 6.0%
62	Skardu	Suzuki Pick UP KC-7108	1985	Petrol	29-Jul-10	1.92	1.99	1.98	New Vehicle 4.5% Used Vehicle 6.0%
63	Skardu	Toyota 2.0 D Saloon NCP SKD-01-0097	1997	Diesel	29-Jul-10	0.51	0.49	0.49	New Vehicle 4.5% Used Vehicle 6.0%
64	Skardu	Toyota Saloon NCP-SKD 01-0903	1996	Diesel	29-Jul-10	0.49	0.42	0.45	New Vehicle 4.5% Used Vehicle 6.0%
65	Skardu	Toyota Saloon PSR-10	1998	Diesel	29-Jul-10	0.39	0.38	0.38	New Vehicle 4.5% Used Vehicle 6.0%
66	Skardu	Suzuki Mehran LED-6793	2007	Petrol	29-Jul-10	1.08	1.09	1.09	New Vehicle 4.5% Used Vehicle 6.0%
67	Skardu	Toyota Corrola D-5917	1982	Diesel	29-Jul-10	0.45	0.46	0.46	New Vehicle 4.5% Used Vehicle 6.0%
68	Skardu	Toyota Corrola NCP-SKD-01-0318	1990	Diesel	29-Jul-10	0.32	0.35	0.36	New Vehicle 4.5% Used Vehicle 6.0%

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
69	Skardu	Toyota Corrola RIL-2767	1978	Diesel	29-Jul-10	0.34	0.35	0.36	New Vehicle 4.5% Used Vehicle 6.0%
70	Skardu	Suzuki FX LHH-2522	1987	Petrol	29-Jul-10	2.52	2.56	2.55	New Vehicle 4.5% Used Vehicle 6.0%
71	Skardu	Toyota Wagi NCP-SKD 01-0046	1993	Diesel	29-Jul-10	0.42	0.41	0.39	New Vehicle 4.5% Used Vehicle 6.0%
72	Skardu	Toyota Saloon NCP-GLT 01-1239	1992	Diesel	29-Jul-10	0.57	0.51	0.52	New Vehicle 4.5% Used Vehicle 6.0%
73	Skardu	Toyota Corrola MNC-7	1983	Diesel	30-Jul-10	0.29	0.25	0.26	New Vehicle 4.5% Used Vehicle 6.0%
74	Skardu	Toyota Saloon Skardu-097	2000	Diesel	30-Jul-10	0.32	0.30	0.31	New Vehicle 4.5% Used Vehicle 6.0%
75	Skardu	Suzuki Mehran RLE-470	2002	Petrol	30-Jul-10	1.09	1.10	1.10	New Vehicle 4.5% Used Vehicle 6.0%
76	Skardu	Suzuki Pick Up BLN-1630	1996	Petrol	30-Jul-10	2.10	2.11	2.11	New Vehicle 4.5% Used Vehicle 6.0%
77	Skardu	Suzuki Bolan LWE 3729	1998	Petrol	30-Jul-10	1.04	1.05	1.05	New Vehicle 4.5% Used Vehicle 6.0%
78	Skardu	Suzuki FX LHM-2116	1988	Petrol	30-Jul-10	3.26	3.26	3.26	New Vehicle 4.5% Used Vehicle 6.0%
79	Skardu	Suzuki Mehran LRQ-3063	1994	Petrol	30-Jul-10	3.70	3.76	3.76	New Vehicle 4.5% Used Vehicle 6.0%
80	Skardu	Toyota Corrola BLN-7777	1977	Diesel	30-Jul-10	4.20	4.30	4.30	New Vehicle 4.5% Used Vehicle 6.0%

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
81	Skardu	Toyota Corrola RIK-1926	1982	Diesel	30-Jul-10	2.20	2.30	2.30	New Vehicle 4.5% Used Vehicle 6.0%
82	Skardu	Toyota Jeep GHE-1211	1976	Diesel	30-Jul-10	1.70	1.80	1.80	New Vehicle 4.5% Used Vehicle 6.0%
83	Skardu	Suzuki Pick Up BLN-1445	1990	Petrol	30-Jul-10	1.09	1.09	1.09	New Vehicle 4.5% Used Vehicle 6.0%
84	Skardu	Toyota Corrola KH-7007	1982	Diesel	30-Jul-10	2.01	2.02	2.02	New Vehicle 4.5% Used Vehicle 6.0%
85	Astore	Toyota Corrola NCP GZR-01-0075	1988	Diesel	2-Aug-10	1.02	1.03	1.03	New Vehicle 4.5% Used Vehicle 6.0%
86	Astore	Toyota 2.0D Saloon NCP GLT-01-1093	1998	Diesel	2-Aug-10	0.91	0.92	0.92	New Vehicle 4.5% Used Vehicle 6.0%
87	Astore	Toyota Corrola NCP AST-01-0190	1983	Diesel	2-Aug-10	2.01	2.04	2.04	New Vehicle 4.5% Used Vehicle 6.0%
88	Astore	Toyota Wagi NCP AST-01-0182	1988	Diesel	2-Aug-10	2.36	2.39	2.39	New Vehicle 4.5% Used Vehicle 6.0%
89	Astore	Toyota Jeep GLTA 3902	1982	Diesel	2-Aug-10	2.76	2.81	2.81	New Vehicle 4.5% Used Vehicle 6.0%
90	Astore	Toyota Jeep ME-8624	1976	Diesel	2-Aug-10	1.98	1.99	1.99	New Vehicle 4.5% Used Vehicle 6.0%
91	Astore	Toyota Jeep Astore-14	1990	Diesel	2-Aug-10	0.12	0.14	0.14	New Vehicle 4.5% Used Vehicle 6.0%
92	Astore	Toyota Corrola NCP Astore 01-0148	1988	Diesel	2-Aug-10	0.76	0.77	0.77	New Vehicle 4.5% Used Vehicle 6.0%

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
93	Astore	Toyota Hiace NCP Astore 01-0159	1996	Diesel	2-Aug-10	0.92	0.94	0.94	New Vehicle 4.5% Used Vehicle 6.0%
94	Astore	Suzuki Mehran LWM-124	1998	Petrol	2-Aug-10	1.20	1.20	1.20	New Vehicle 4.5% Used Vehicle 6.0%
95	Chilas	Toyota Saloon NCP DMR-01-483	1996	Diesel	3-Aug-10	1.19	1.22	1.22	New Vehicle 4.5% Used Vehicle 6.0%
96	Chilas	Toyota Wagi NCP DMR-01-393	1994	Diesel	3-Aug-10	0.98	0.97	0.97	New Vehicle 4.5% Used Vehicle 6.0%
97	Chilas	Toyota Wagi NCP DMR-01-350	1990	Diesel	3-Aug-10	1.32	1.36	1.36	New Vehicle 4.5% Used Vehicle 6.0%
98	Chilas	Toyota Corrola NCP DMR-01-0043	1983	Diesel	3-Aug-10	2.07	2.09	2.09	New Vehicle 4.5% Used Vehicle 6.0%
99	Chilas	Toyota Corrola NCP DMR-01-416	1986	Diesel	3-Aug-10	1.87	1.88	1.88	New Vehicle 4.5% Used Vehicle 6.0%
100	Chilas	Toyota Saloon NCP DMR-01-0008	1998	Diesel	3-Aug-10	0.72	0.74	0.74	New Vehicle 4.5% Used Vehicle 6.0%
101	Chilas	Toyota Hiace NCP DMR-01-0033	1992	Diesel	3-Aug-10	2.04	2.06	2.06	New Vehicle 4.5% Used Vehicle 6.0%
102	Chilas	Toyota Hiace NCP DMR-01-0414	1990	Diesel	3-Aug-10	1.96	1.97	1.97	New Vehicle 4.5% Used Vehicle 6.0%

VEHICULAR EMISSION MONITORING NOISE LEVEL (DB)

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
1	Gilgit	Toyota Corola GLT 01-0440 (NCP)	1990	Diesel	21-Jul-10	71.20	71.30	71.30	85.00
2	Gilgit	Suzuki Bolan GAR 4306	2007	Petrol	21-Jul-10	68.70	68.50	68.50	85.00
3	Gilgit	Suzuki Potohar GLT 1632	1987	Diesel	21-Jul-10	76.50	76.40	76.40	85.00
4	Gilgit	Suzuki Pick Up GLT 9712	1986	Petrol	21-Jul-10	76.20	76.10	76.10	85.00
5	Gilgit	Army Vehicle Mitsubishi Double Caben	2007	Diesel	21-Jul-10	69.00	70.00	70.00	85.00
6	Gilgit	Suzuki Jimmy GLT-C-52	2009	Petrol	21-Jul-10	65.00	66.00	66.00	85.00
7	Gilgit	Toyota Corolla SE Saloon PSM 1612	1996	Diesel	21-Jul-10	75.00	76.00	75.00	85.00
8	Gilgit	Suzuki Bolan IDM 4984	2004	Petrol	21-Jul-10	75.00	75.00	74.00	85.00
9	Gilgit	Toyota Corolla Wagi	2002	Petrol	21-Jul-10	69.00	70.00	69.00	85.00
10	Gilgit	Toyota Hiace	2009	Diesel	21-Jul-10	72.00	73.00	73.00	85.00
11	Gilgit	Toyota Corolla Prado Tx GLT-02-0014	2008	Diesel	21-Jul-10	74.00	73.00	73.00	85.00
12	Gilgit	Suzuki Bolan EA 1666 Karachi	2002	Petrol	21-Jul-10	75.00	76.00	75.00	85.00
13	Gilgit	Suzuki Pick Up GLT-A-3348	1991	Petrol	21-Jul-10	75.00	74.00	74.00	85.00
14	Gilgit	Suzuki Pick Up MA 6205	1992	Petrol	21-Jul-10	75.00	76.00	76.00	85.00
15	Gilgit	Suzuki Potohar GLT-A-3422	1988	Petrol	21-Jul-10	76.00	76.00	75.00	85.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
16	Gilgit	Toyota Hiace Double Caben Ghizer 543	1992	Diesel	21-Jul-10	73.00	74.00	74.00	85.00
17	Gilgit	Prado (NCP) Gilgit-02-0402	1997	Diesel	21-Jul-10	73.00	74.00	74.00	85.00
18	Gilgit	Toyota Hiace NCP-DMR-74	1994	Diesel	21-Jul-10	77.00	78.00	77.00	85.00
19	Gilgit	Toyota 200 GLT 0842	1994	Diesel	21-Jul-10	74.00	75.00	74.00	85.00
20	Gilgit	Toyota Lx Limited Gilgit 01-1020	1998	Diesel	21-Jul-10	74.00	75.00	74.00	85.00
21	Gilgit	Hyundai Shehzore GLT B 174	2005	Diesel	21-Jul-10	74.00	73.00	73.00	85.00
22	Gilgit	Toyota Corolla 20D GLT-0058	1994	Diesel	21-Jul-10	74.00	73.00	73.00	85.00
23	Gilgit	Toyota Hiace GLT 5877	1988	Diesel	21-Jul-10	75.00	75.00	74.00	85.00
24	Gilgit	Land Rover GLT 6039	2004	Diesel	21-Jul-10	76.00	76.00	74.00	85.00
25	Gilgit	Suzuki Pick Up GLT 3718	1984	Petrol	21-Jul-10	76.00	75.00	76.00	85.00
26	Gilgit	Toyota Corola Wagi KM 126	1996	Diesel	21-Jul-10	75.00	76.00	76.00	85.00
27	Gilgit	Toyota Corola Gilgit-01-1480	1990	Diesel	21-Jul-10	76.00	77.00	77.00	85.00
28	Gilgit	Suzuki Jimmy BLTC 19	2007	Petrol	21-Jul-10	69.00	70.00	70.00	85.00
29	Hunza	Toyota Corola SE Saloon Gilgit 01-2301	1990	Diesel	25-Jul-10	77.00	78.00	78.00	85.00
30	Hunza	Massey Ferguson 240 GLTA 6622	1998	Diesel	25-Jul-10	80.00	81.00	80.00	85.00
31	Hunza	Toyota Pajero MNR 02-105	1995	Diesel	25-Jul-10	72.00	73.00	73.00	85.00
32	Hunza	Toyota Double Door MX-176	2008	Diesel	25-Jul-10	72.00	73.00	73.00	85.00
33	Hunza	Toyota Hiace BLN 2811	1984	Diesel	25-Jul-10	76.00	75.00	75.00	85.00
34	Hunza	Toyota Double Door GZR-1072	2007	Diesel	25-Jul-10	73.00	74.00	72.00	85.00
35	Hunza	Toyota Jeep GLT-A 1810	1975	Diesel	25-Jul-10	75.00	76.00	75.00	85.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
36	Hunza	Toyota Hiace NCP-GLT-04-276	1994	Diesel	25-Jul-10	76.00	75.00	75.00	85.00
37	Hunza	Toyota Hiace NCP-GLT-04-0342	1990	Diesel	25-Jul-10	76.00	75.00	76.00	85.00
38	Hunza	Suzuki Bolan AAB-1260	2000	Petrol	25-Jul-10	70.00	69.00	70.00	85.00
39	Hunza	Toyota Corolla NCP-01-2169	1988	Diesel	25-Jul-10	75.00	76.00	76.00	85.00
40	Hunza	Toyota Hilux Double Door KG-853	2008	Diesel	25-Jul-10	72.00	72.00	73.00	85.00
41	Ghizer	Toyota Corola Saloon GZR-01-2000	1996	Diesel	26-Jul-10	75.00	74.00	74.00	85.00
42	Ghizer	Massey Ferguson 240 GLT-2630	1990	Diesel	26-Jul-10	79.00	78.00	79.00	85.00
43	Ghizer	Toyota Wagi GLT NCP-01-1836	1996	Diesel	26-Jul-10	74.20	74.10	74.10	85.00
44	Ghizer	Toyota DadsunGZR-2020	1994	Diesel	26-Jul-10	76.20	76.10	76.10	85.00
45	Ghizer	Toyota Hiace GZR-04-0039	1972	Diesel	26-Jul-10	76.50	76.20	76.90	85.00
46	Ghizer	Suzuki Mehran PS-0399	2004	Petrol	26-Jul-10	68.20	68.20	68.30	85.00
47	Ghizer	Townace Pick Up GZR-01-0145	1990	Diesel	26-Jul-10	77.20	77.50	77.60	85.00
48	Ghizer	Suzuki Mehran IDL-1362	2006	Petrol	26-Jul-10	67.00	67.10	67.10	85.00
49	Ghizer	Hyundai Shehzore KP-2555	1992	Diesel	26-Jul-10	78.20	78.10	78.10	85.00
50	Ghizer	Toyota Hiace GLT-5804	1993	Diesel	26-Jul-10	76.20	76.20	76.40	85.00
51	Ghanche	Toyota Corrola MIA-1314	1982	Diesel	28-Jul-10	78.10	78.20	78.80	85.00
52	Ghanche	Toyota Jeep BLN-1456	1982	Diesel	28-Jul-10	79.20	79.50	79.60	85.00
53	Ghanche	Toyota Corrola NCP Khaplu-01-727	1990	Diesel	28-Jul-10	80.10	80.20	80.50	85.00
54	Ghanche	Suzuki FX BLN-2377	1984	Petrol	28-Jul-10	76.20	76.50	76.60	85.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
55	Ghanche	Suzuki Cuore NCP Sakardu-01-0755	2006	Petrol	28-Jul-10	72.10	72.40	72.50	85.00
56	Ghanche	Townace Pick Up NCP Khaplu-01-812	1992	Diesel	28-Jul-10	78.50	78.50	78.60	85.00
57	Ghanche	App Fou Massey Ferguson 240 (Tractor)	2009	Diesel	28-Jul-10	80.00	79.90	79.90	85.00
58	Ghanche	Toyota Mini Jeep AJK-B 4159	1985	Diesel	28-Jul-10	79.50	80.20	80.90	85.00
59	Ghanche	Toyota Corrola N-6126	1982	Diesel	28-Jul-10	76.50	76.90	76.90	85.00
60	Ghanche	Toyota Wagi NCP-KHP 01-0104	1996	Diesel	28-Jul-10	78.50	78.60	78.60	85.00
61	Skardu	Toyota Corrola LX-4093	1973	Diesel	29-Jul-10	81.20	81.50	81.60	85.00
62	Skardu	Suzuki Pick UP KC-7108	1985	Petrol	29-Jul-10	79.20	79.20	79.90	85.00
63	Skardu	Toyota 2.0 D Saloon NCP SKD-01-0097	1997	Diesel	29-Jul-10	78.80	78.00	78.00	85.00
64	Skardu	Toyota Saloon NCP-SKD 01-0903	1996	Diesel	29-Jul-10	79.60	79.60	79.90	85.00
65	Skardu	Toyota Saloon PSR-10	1998	Diesel	29-Jul-10	79.50	79.60	79.50	85.00
66	Skardu	Suzuki Mehran LED-6793	2007	Petrol	29-Jul-10	70.20	70.60	70.60	85.00
67	Skardu	Toyota Corrola D-5917	1982	Diesel	29-Jul-10	80.50	80.20	80.10	85.00
68	Skardu	Toyota Corrola NCP-SKD-01-0318	1990	Diesel	29-Jul-10	79.90	79.50	79.50	85.00
69	Skardu	Toyota Corrola RIL-2767	1978	Diesel	29-Jul-10	81.20	81.50	81.90	85.00
70	Skardu	Suzuki FX LHH-2522	1987	Petrol	29-Jul-10	78.50	78.90	78.90	85.00
71	Skardu	Toyota Wagi NCP-SKD 01-0046	1993	Diesel	29-Jul-10	79.00	78.90	78.90	85.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
72	Skardu	Toyota Saloon NCP-GLT 01-1239	1992	Diesel	29-Jul-10	78.90	78.70	78.60	85.00
73	Skardu	Toyota Corrola MNC-7	1983	Diesel	30-Jul-10	80.90	80.60	80.60	85.00
74	Skardu	Toyota Saloon Skardu-097	2000	Diesel	30-Jul-10	78.50	78.10	78.00	85.00
75	Skardu	Suzuki Mehran RLE-470	2002	Petrol	30-Jul-10	76.10	76.00	76.00	85.00
76	Skardu	Suzuki Pick Up BLN-1630	1996	Petrol	30-Jul-10	72.30	72.50	72.30	85.00
77	Skardu	Suzuki Bolan LWE 3729	1998	Petrol	30-Jul-10	72.00	73.00	73.00	85.00
78	Skardu	Suzuki FX LHM-2116	1988	Petrol	30-Jul-10	74.00	74.00	74.00	85.00
79	Skardu	Suzuki Mehran LRQ-3063	1994	Petrol	30-Jul-10	74.00	75.00	75.00	85.00
80	Skardu	Toyota Corrola BLN-7777	1977	Diesel	30-Jul-10	76.00	76.00	76.00	85.00
81	Skardu	Toyota Corrola RIK-1926	1982	Diesel	30-Jul-10	74.00	74.00	74.00	85.00
82	Skardu	Toyota Jeep GHE-1211	1976	Diesel	30-Jul-10	72.00	72.00	72.00	85.00
83	Skardu	Suzuki Pick Up BLN-1445	1990	Petrol	30-Jul-10	73.00	73.00	73.00	85.00
84	Skardu	Toyota Corrola KH-7007	1982	Diesel	30-Jul-10	73.00	73.00	73.00	85.00
85	Astore	Toyota Corrola NCP GZR-01-0075	1988	Diesel	2-Aug-10	74.00	75.00	74.00	85.00
86	Astore	Toyota 2.0D Saloon NCP GLT-01-1093	1998	Diesel	2-Aug-10	76.00	77.00	77.00	85.00
87	Astore	Toyota Corrola NCP AST-01-0190	1983	Diesel	2-Aug-10	76.00	77.00	77.00	85.00
88	Astore	Toyota Wagi NCP AST-01-0182	1988	Diesel	2-Aug-10	74.00	75.00	75.00	85.00
89	Astore	Toyota Jeep GLTA 3902	1982	Diesel	2-Aug-10	74.00	75.00	75.00	85.00
90	Astore	Toyota Jeep ME-8624	1976	Diesel	2-Aug-10	74.00	75.00	75.00	85.00
91	Astore	Toyota Jeep Astore-14	1990	Diesel	2-Aug-10	74.00	75.00	75.00	85.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading 1	Reading 2	Reading 3	Limits As Per NEQS
92	Astore	Toyota Corrola NCP Astore 01-0148	1988	Diesel	2-Aug-10	71.00	72.00	72.00	85.00
93	Astore	Toyota Hiace NCP Astore 01-0159	1996	Diesel	2-Aug-10	71.00	73.00	73.00	85.00
94	Astore	Suzuki Mehran LWM-124	1998	Petrol	2-Aug-10	72.00	73.00	73.00	85.00
95	Chilas	Toyota Saloon NCP DMR-01-483	1996	Diesel	3-Aug-10	76.00	77.00	77.00	85.00
96	Chilas	Toyota Wagi NCP DMR-01-393	1994	Diesel	3-Aug-10	76.00	75.00	75.00	85.00
97	Chilas	Toyota Wagi NCP DMR-01-350	1990	Diesel	3-Aug-10	74.00	75.00	75.00	85.00
98	Chilas	Toyota Corrola NCP DMR-01-0043	1983	Diesel	3-Aug-10	73.00	74.00	74.00	85.00
99	Chilas	Toyota Corrola NCP DMR-01-416	1986	Diesel	3-Aug-10	74.00	76.00	76.00	85.00
100	Chilas	Toyota Saloon NCP DMR-01-0008	1998	Diesel	3-Aug-10	72.00	73.00	73.00	85.00
101	Chilas	Toyota Hiace NCP DMR-01-0033	1992	Diesel	3-Aug-10	74.00	75.00	75.00	85.00
102	Chilas	Toyota Hiace NCP DMR-01-0414	1990	Diesel	3-Aug-10	74.00	75.00	75.00	85.00

VEHICULAR EMISSION MONITORING SMOKE DENSITY (RINGLEMAN SCALE)

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading	Limits As Per NEQS
1	Gilgit	Toyota Corola GLT 01-0440 (NCP)	1990	Diesel	21-Jul-10	2.00	2.00
2	Gilgit	Suzuki Bolan GAR 4306	2007	Petrol	21-Jul-10	1.00	2.00
3	Gilgit	Suzuki Potohar GLT 1632	1987	Diesel	21-Jul-10	2.00	2.00
4	Gilgit	Suzuki Pick Up GLT 9712	1986	Petrol	21-Jul-10	2.00	2.00
5	Gilgit	Army Vehicle Mitsubishi Double Caben	2007	Diesel	21-Jul-10	1.00	2.00
6	Gilgit	Suzuki Jimmy GLT-C-52	2009	Petrol	21-Jul-10	1.00	2.00
7	Gilgit	Toyota Corolla SE Saloon PSM 1612	1996	Diesel	21-Jul-10	3.00	2.00
8	Gilgit	Suzuki Bolan IDM 4984	2004	Petrol	21-Jul-10	1.00	2.00
9	Gilgit	Toyota Corolla Wagi	2002	Petrol	21-Jul-10	1.00	2.00
10	Gilgit	Toyota Hiace	2009	Diesel	21-Jul-10	2.00	2.00
11	Gilgit	Toyota Corolla Prado Tx GLT-02-0014	2008	Diesel	21-Jul-10	2.00	2.00
12	Gilgit	Suzuki Bolan EA 1666 Karachi	2002	Petrol	21-Jul-10	1.00	2.00
13	Gilgit	Suzuki Pick Up GLT-A-3348	1991	Petrol	21-Jul-10	2.00	2.00
14	Gilgit	Suzuki Pick Up MA 6205	1992	Petrol	21-Jul-10	2.00	2.00
15	Gilgit	Suzuki Potohar GLT-A-3422	1988	Petrol	21-Jul-10	3.00	2.00
16	Gilgit	Toyota Hiace Double Caben Ghizer 543	1992	Diesel	21-Jul-10	2.00	2.00
17	Gilgit	Prado (NCP) Gilgit-02-0402	1997	Diesel	21-Jul-10	2.00	2.00
18	Gilgit	Toyota Hiace NCP-DMR-74	1994	Diesel	21-Jul-10	3.00	2.00
19	Gilgit	Toyota 200 GLT 0842	1994	Diesel	21-Jul-10	3.00	2.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading	Limits As Per NEQS
20	Gilgit	Toyota Lx Limited Gilgit 01-1020	1998	Diesel	21-Jul-10	2.00	2.00
21	Gilgit	Hyundai Shehzore GLT B 174	2005	Diesel	21-Jul-10	2.00	2.00
22	Gilgit	Toyota Corolla 20D GLT-0058	1994	Diesel	21-Jul-10	2.00	2.00
23	Gilgit	Toyota Hiace GLT 5877	1988	Diesel	21-Jul-10	2.00	2.00
24	Gilgit	Land Rover GLT 6039	2004	Diesel	21-Jul-10	2.00	2.00
25	Gilgit	Suzuki Pick Up GLT 3718	1984	Petrol	21-Jul-10	3.00	2.00
26	Gilgit	Toyota Corola Wagi KM 126	1996	Diesel	21-Jul-10	3.00	2.00
27	Gilgit	Toyota Corola Gilgit-01-1480	1990	Diesel	21-Jul-10	3.00	2.00
28	Gilgit	Suzuki Jimmy BLTC 19	2007	Petrol	21-Jul-10	2.00	2.00
29	Hunza	Toyota Corola SE Saloon Gilgit 01-2301	1990	Diesel	25-Jul-10	3.00	2.00
30	Hunza	Massey Ferguson 240 GLTA 6622	1998	Diesel	25-Jul-10	3.00	2.00
31	Hunza	Toyota Pajero MNR 02-105	1995	Diesel	25-Jul-10	2.00	2.00
32	Hunza	Toyota Double Door MX-176	2008	Diesel	25-Jul-10	2.00	2.00
33	Hunza	Toyota Hiace BLN 2811	1984	Diesel	25-Jul-10	2.00	2.00
34	Hunza	Toyota Double Door GZR-1072	2007	Diesel	25-Jul-10	2.00	2.00
35	Hunza	Toyota Jeep GLT-A 1810	1975	Diesel	25-Jul-10	3.00	2.00
36	Hunza	Toyota Hiace NCP-GLT-04-276	1994	Diesel	25-Jul-10	2.00	2.00
37	Hunza	Toyota Hiace NCP-GLT-04-0342	1990	Diesel	25-Jul-10	2.00	2.00
38	Hunza	Suzuki Bolan AAB-1260	2000	Petrol	25-Jul-10	2.00	2.00
39	Hunza	Toyota Corolla NCP-01-2169	1988	Diesel	25-Jul-10	3.00	2.00
40	Hunza	Toyota Hilux Double Door KG-853	2008	Diesel	25-Jul-10	2.00	2.00
41	Ghizer	Toyota Corola Saloon GZR-01-2000	1996	Diesel	26-Jul-10	2.00	2.00
42	Ghizer	Massey Ferguson 240 GLT-2630	1990	Diesel	26-Jul-10	3.00	2.00
43	Ghizer	Toyota Wagi GLT NCP-01-1836	1996	Diesel	26-Jul-10	2.00	2.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading	Limits As Per NEQS
44	Ghizer	Toyota DadsunGZR-2020	1994	Diesel	26-Jul-10	2.00	2.00
45	Ghizer	Toyota Hiace GZR-04-0039	1972	Diesel	26-Jul-10	2.00	2.00
46	Ghizer	Suzuki Mehran PS-0399	2004	Petrol	26-Jul-10	1.00	2.00
47	Ghizer	Townace Pick Up GZR-01-0145	1990	Diesel	26-Jul-10	2.00	2.00
48	Ghizer	Suzuki Mehran IDL-1362	2006	Petrol	26-Jul-10	1.00	2.00
49	Ghizer	Hyundai Shehzore KP-2555	1992	Diesel	26-Jul-10	2.00	2.00
50	Ghizer	Toyota Hiace GLT-5804	1993	Diesel	26-Jul-10	2.00	2.00
51	Ghanche	Toyota Corrola MIA-1314	1982	Diesel	28-Jul-10	3.00	2.00
52	Ghanche	Toyota Jeep BLN-1456	1982	Diesel	28-Jul-10	3.00	2.00
53	Ghanche	Toyota Corrola NCP Khaplu-01-727	1990	Diesel	28-Jul-10	3.00	2.00
54	Ghanche	Suzuki FX BLN-2377	1984	Petrol	28-Jul-10	3.00	2.00
55	Ghanche	Suzuki Cuore NCP Sakardu-01-0755	2006	Petrol	28-Jul-10	1.00	2.00
56	Ghanche	Townace Pick Up NCP Khaplu-01-812	1992	Diesel	28-Jul-10	3.00	2.00
57	Ghanche	App Fou Massey Ferguson 240 (Tractor)	2009	Diesel	28-Jul-10	2.00	2.00
58	Ghanche	Toyota Mini Jeep AJK-B 4159	1985	Diesel	28-Jul-10	3.00	2.00
59	Ghanche	Toyota Corrola N-6126	1982	Diesel	28-Jul-10	3.00	2.00
60	Ghanche	Toyota Wagi NCP-KHP 01-0104	1996	Diesel	28-Jul-10	3.00	2.00
61	Skardu	Toyota Corrola LX-4093	1973	Diesel	29-Jul-10	3.00	2.00
62	Skardu	Suzuki Pick UP KC-7108	1985	Petrol	29-Jul-10	3.00	2.00
63	Skardu	Toyota 2.0 D Saloon NCP SKD-01-0097	1997	Diesel	29-Jul-10	3.00	2.00
64	Skardu	Toyota Saloon NCP-SKD 01-0903	1996	Diesel	29-Jul-10	3.00	2.00
65	Skardu	Toyota Saloon PSR-10	1998	Diesel	29-Jul-10	3.00	2.00
66	Skardu	Suzuki Mehran LED-6793	2007	Petrol	29-Jul-10	1.00	2.00
67	Skardu	Toyota Corrola D-5917	1982	Diesel	29-Jul-10	3.00	2.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading	Limits As Per NEQS
68	Skardu	Toyota Corrola NCP-SKD-01-0318	1990	Diesel	29-Jul-10	3.00	2.00
69	Skardu	Toyota Corrola RIL-2767	1978	Diesel	29-Jul-10	3.00	2.00
70	Skardu	Suzuki FX LHH-2522	1987	Petrol	29-Jul-10	2.00	2.00
71	Skardu	Toyota Wagi NCP-SKD 01-0046	1993	Diesel	29-Jul-10	3.00	2.00
72	Skardu	Toyota Saloon NCP-GLT 01-1239	1992	Diesel	29-Jul-10	3.00	2.00
73	Skardu	Toyota Corrola MNC-7	1983	Diesel	30-Jul-10	3.00	2.00
74	Skardu	Toyota Saloon Skardu-097	2000	Diesel	30-Jul-10	2.00	2.00
75	Skardu	Suzuki Mehran RLE-470	2002	Petrol	30-Jul-10	2.00	2.00
76	Skardu	Suzuki Pick Up BLN-1630	1996	Petrol	30-Jul-10	2.00	2.00
77	Skardu	Suzuki Bolan LWE 3729	1998	Petrol	30-Jul-10	1.00	2.00
78	Skardu	Suzuki FX LHM-2116	1988	Petrol	30-Jul-10	2.00	2.00
79	Skardu	Suzuki Mehran LRQ-3063	1994	Petrol	30-Jul-10	2.00	2.00
80	Skardu	Toyota Corrola BLN-7777	1977	Diesel	30-Jul-10	3.00	2.00
81	Skardu	Toyota Corrola RIK-1926	1982	Diesel	30-Jul-10	1.00	2.00
82	Skardu	Toyota Jeep GHE-1211	1976	Diesel	30-Jul-10	3.00	2.00
83	Skardu	Suzuki Pick Up BLN-1445	1990	Petrol	30-Jul-10	2.00	2.00
84	Skardu	Toyota Corrola KH-7007	1982	Diesel	30-Jul-10	2.00	2.00
85	Astore	Toyota Corrola NCP GZR-01-0075	1988	Diesel	2-Aug-10	2.00	2.00
86	Astore	Toyota 2.0D Saloon NCP GLT-01-1093	1998	Diesel	2-Aug-10	2.00	2.00
87	Astore	Toyota Corrola NCP AST-01-0190	1983	Diesel	2-Aug-10	2.00	2.00
88	Astore	Toyota Wagi NCP AST-01-0182	1988	Diesel	2-Aug-10	3.00	2.00
89	Astore	Toyota Jeep GLTA 3902	1982	Diesel	2-Aug-10	3.00	2.00
90	Astore	Toyota Jeep ME-8624	1976	Diesel	2-Aug-10	2.00	2.00
91	Astore	Toyota Jeep Astore-14	1990	Diesel	2-Aug-10	2.00	2.00

No:	Place of Interventions:	Monitoring Point:	Model:	Fuel Type:	Date of Interventions:	Reading	Limits As Per NEQS
92	Astore	Toyota Corrola NCP Astore 01-0148	1988	Diesel	2-Aug-10	2.00	2.00
93	Astore	Toyota Hiace NCP Astore 01-0159	1996	Diesel	2-Aug-10	1.00	2.00
94	Astore	Suzuki Mehran LWM-124	1998	Petrol	2-Aug-10	1.00	2.00
95	Chilas	Toyota Saloon NCP DMR-01-483	1996	Diesel	3-Aug-10	1.00	2.00
96	Chilas	Toyota Wagi NCP DMR-01-393	1994	Diesel	3-Aug-10	2.00	2.00
97	Chilas	Toyota Wagi NCP DMR-01-350	1990	Diesel	3-Aug-10	2.00	2.00
98	Chilas	Toyota Corrola NCP DMR-01-0043	1983	Diesel	3-Aug-10	2.00	2.00
99	Chilas	Toyota Corrola NCP DMR-01-416	1986	Diesel	3-Aug-10	2.00	2.00
100	Chilas	Toyota Saloon NCP DMR-01-0008	1998	Diesel	3-Aug-10	1.00	2.00
101	Chilas	Toyota Hiace NCP DMR-01-0033	1992	Diesel	3-Aug-10	2.00	2.00
102	Chilas	Toyota Hiace NCP DMR-01-0414	1990	Diesel	3-Aug-10	2.00	2.00

ANNEXURE 8: HEALTH AND ENVIRONMENTAL IMPACT OF AIR POLLUTANTS

Pollutants	Source	Potential Health Effects	Environmental Impacts
Particulate matters (PM-10/2.5)	Emitted as particles or formed through chemical reactions; burning of wood, diesel, and other fuels; industrial processes; agriculture (plowing, field burning); unpaved roads	Respiratory infections COPD and exacerbation Wheezing, asthma Excess mortality including CVD	Source of haze, which Reduces visibility. Ashes, smoke, soot, and dust can dirty and discolor structures and property, including clothes and furniture.
Carbon Monoxide (CO)	Burning of gasoline, natural gas, coal, oil, fire wood burning, transport, cigarette smoke and	Low birth weight, Increased perinatal deaths. CO enters the blood stream through the lungs and binds to hemoglobin, the substance in blood that carries oxygen to cells. It actually reduces the amount of oxygen reaching the blood organs and tissues. CO in concentrations of 2000 ppm causes death by interfering with the distribution of oxygen in the body.	
Carbon Dioxide CO₂	Fossil fuel combustion (or burning)	Headaches, dizziness, restlessness, a tingling or pins or needles feeling, difficulty in breathing, sweating, tiredness, increased heart rate, elevated blood pressure, coma, asphyxia to convulsions and even frostbite if exposed to dry ice.	Climate change, including rising temperatures, melting of glaciers, flooding, severe droughts, and intense storms like hurricanes and tornadoes

Pollutants	Source	Potential Health Effects	Environmental
Nitrogen Oxides (NOx)	Burning of gasoline, natural gas, coal, and oil. (Cars are a major source of NOx.)	Wheezing Respiratory infections and reduced lung functions	Ozone (smog) effects; precursor of acid rain which damages trees, lakes, and soil. Aerosols can reduce visibility. Acid rain also causes buildings, statues, and monuments to deteriorate
Sulphur Oxides (SOx)	Burning of coal and oil, especially high sulfur coal; industrial processes (paper manufacturing, metal smelting) and volcanic eruption	Wheezing, asthma COPD, CVD, respiratory illness, breathing problems, may cause permanent damage to lungs. Bronchoconstriction	Precursor of acid rain, which can damage trees, lakes, and soil. Aerosols can reduce visibility Acid rain also causes buildings, statues, and monuments to deteriorate, primary air pollutants such as Sulphur dioxide and Nitrogen dioxide, can effect the breathing of animals.
Smoke	Burning of gasoline, natural gas, coal, oil.	Cataract, Secondhand smoke is also linked to sudden Infant Death Syndrome (SIDS). Secondhand smoke can cause lung cancer in adults and has also bad effects on human hearts	Atmospheric effects of air pollution include urban smog and reduced visibility, Smoke + Fog = Smog



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