

# Activities Undertaken by Pak-EPA

Pakistan is facing the challenge of achieving environmental sound development without disturbing economic growth. These concerns highlight the importance of (a) formulating a programme for policy reform for industrial efficiency and environmental management and outline a policy framework matrix, which is followed by an action plan, and, (b) preparing a detailed study on capacity building of environment management in the industry of Pakistan.

To achieve this challenging task, the Federal and Provincial Protection Agencies have been strengthened to monitor the environmental pollution. Furthermore, industries are being encouraged to get registered under 'Self Monitoring & Reporting System' (SMART). The other areas of prime focus are energy & water conservation. A number of initiatives have been taken to ensure efficient usage of energy and water. Emphasis is also being given on renewable energy resources. Some of the major interventions undertaken by Pak-EPA are given below::

## **Environmental Impact Assessment (EIA):**

The EIA process is gaining recognition in Pakistan both in public and private sector. The Federal and Provincial Environmental Protection Agencies (EPAs) are engaged in carrying out review of various EIAs submitted to them. The petroleum, communication, cement, chemicals, and housing sector were the leading sectors went through the process of EIA. Detail of status of EIA / IEE approval and processing is given below:

## Approved EIA and IEE cases

S. No	Name of Project	Date of Admission of Application	EIA / IEE	Issue Date of Env. Approval	Remarks.
i.	Pakistan Highway Rehabilitation Project N-5 & M-9 (Phase-1).	21-04-2003	EIA	19-09-2003	Conditional approval accorded
ii.	Pakistan Highway Rehabilitation Project N-5 (Phase-II).	06-01-2004	EIA	19-05-2004	Conditional approval accorded
iii.	Kachhi Canal Project	14-04-2004	EIA	03-02-2007	Conditional approval accorded
iv.	Construction of Road from Baroha to Ghambeer ( Shingle Road)	31-08-2004	IEE	04-10-2004	
v.	Constructions of Islamabad Chalets Holiday Resort	20-06-2005	IEE	24-08-2005	Case is in Honorable Supreme Court.
vi.	Machike-Morgah (271 KM length & 16 inches dia) Pipeline Project.	03-02-2005	IEE	18-08-2005	Conditional approval accorded
vii.	Morgah – Tarujabba (138KM length & 12 inches dia) Pipeline Project.	03-02-2005	IEE	18-08-2005	Conditional approval accorded.
viii.	Construction of ESSEM Intercontinental Hotel in Islamabad	02-03-2006	EIA	24-08-2006	Conditional approval accorded.
ix.	Extension of Islamabad Serena Hotel from current capacity of 193 to 400 rooms along with its supporting infrastructure and construction of ancillary, buildings of offices, increase in parking area and landscape development(Const. Phase).	16-10-2006	EIA	25-04-2007	Conditional approval accorded.

S. No	Name of Project	Date of Admission of Application	EIA / IEE	Issue Date of Env. Approval	Remarks.
x.	Al-Hamra Hills Country Housing Scheme Islamabad	25-05-2007	IEE	21-07-2007	Conditional approval accorded.
xi	Construction of 4-Story office building of NBP	18-06-2007	IEE	06-12-2007	Conditional approval accorded.
xii	M/s Renaissance Developers (Pvt.) Limited	29-06-07	IEE	22-11-2007	Conditional approval accorded.
xiii	6 <sup>th</sup> STG ELR Project	26-04-2007	ESA/ EIA	01-01-2008	Conditional approval accorded.
xiv	Zaraj Housing Scheme, Zone – V, Islamabad	15-05-2007	IEE	25-02-2008	Conditional approval accorded.
xv	Construction of Landfill site in Islamabad.	25-04-2006	EIA	28-02-2008	Conditional approval accorded.
xvi	Multi Professionals Cooperative Housing Society Project.	10-06-2006	IEE	28-02-2008	Conditional approval accorded.
xvii	Bahria Town Housing Scheme Project	20-08-2007	EIA	15-08-2008	Conditional approval accorded.
xviii	Mixed Use Development Complex, Blue Area, Isb.	30-03-2007	EIA	20-08-2008	Conditional approval accorded.
xix	2-D Seismic Survey Project	24-01-008	EIA	20-08-2008	Conditional approval accorded.
xx	Avari Hotel, Islamabad.	29-02-2008	EIA	03-09-2008	Conditional approval accorded.
xxi	Jinnah Gardens Phase-I	22-02-2007	IEE	15-09-2008	Conditional approval accorded.
xxii	Development Works In P&V Scheme No Ii, Islamabad	31-12-2007	IEE	29-09-2008	Conditional approval accorded.
xxiii	Marghazar Zoo redevelopment and expansion.	30-01-2008	EIA	06-10-2008	Conditional approval accorded.
xxiv	Development of housing project by Jammu & Kashmir Housing Society.	02-02-2006	IEE	26-01-2009	Conditional approval accorded.
xxv.	Dualization of Garden Avenue, Islamabad.	28-01-2008	IEE	31-01-2009	Project Rejected.

## EIA/ IEE Cases of different Projects are under Review Process

S. No.	Name of Project	Date of Admission of Application	EIA / IEE	Status	Reasons
i.	Development of Account Group Officers Housing Society ( AGOCHS I &2)	02-05-2006	2-IEEs	-	Two IEE reports submitted by the project. After preliminary scrutiny that the IEE reports do not meet the as guidelines given in EIA guidelines resubmit the same as per prescribed procedure. Pak-EPA issued letter of Reminder: 8-09-2007
ii	Development of New Murree Tourist Resort	3-05-2006	IEE	-Pending	Supreme court Case Sub judiced
iii.	Development of Parliamentarian Enclave Zone-V, Islamabad.	01-06-2006	IEE	Pending/ in process	The proponent has not given response EPA initial comments despite repeated
iv.	Senate Secretariat Housing Society, Islamabad.	10-09- 2007	IEE		Observations of review committee forwarded to the proponent dated 2008, no response received till to date
v.	M/s Capital Compost	2-11-2007	EIA	In process	Litigation against project.
vi.	Water Supply Schemes	3-11-2007	IEE	In process	Pending
vii.	Diamer Basha Dam Project	30-11- 2007	EIA	In process	Public hearing at 6 places is proposed

S. No.	Name of Project	Date of Admission of Application	EIA / IEE	Status	Reasons
viii.	New GHQ Complex, Islamabad	16-01- 2008	EIA	In process	Public hearing pending.
ix.	Grand Hyatt Hotel Construction.	14-02-2008	EIA	In process	Draft conditional environmental prepared for signature.
	Development Works in Orchard Scheme.	10-03-2008	IEE	In Process	Project presentation is proposed to
x.	Dadu-Khuzadar Transmission Lines	15-04 2008	EIA	In process	Public hearing is pending.
xi.	I-9, I-10 & I-11 Road Project	16-04-2008	IEE	In process	Conditional environmental approval for signature.
xii.	Construction of Road, E-11.	22-04-2008	IEE	In process	Draft conditional environmental prepared for approval.
xiii.	Jinnah Gardens Phase-II	13-05-2008	IEE	In process	Litigation against project.
xiv.	Construction of Approach Road for Comstech from Attaturk Avenue, G-5, Islamabad.	14-05-2008	IEE	In process	Site monitoring of the project site is
xv.	Construction of Approach Road from Gate No. 3 in PM Secretariat to Helipad of Aiwan-e-Sadar, Islamabad.	14-05-2008	IEE	In process	Site monitoring is done.

S. No.	Name of Project	Date of Admission of Application	EIA / IEE	Status	Reasons
xvi.	Mc Donalds	16-05-2008	IEE	In process.	Supreme court Case Sub judiced
xvii.	Infrastructure development & Construction of 8000 Flats project.	07-07-2008	IEE	In process.	Site Monitoring have been done.
xviii.	Construction of Clifton Heights.	10-09-2008	IEE	In process.	Site Monitoring is proposed to be d
xix.	Metro Cash & Carry Islamabad.	15-07-2008	IEE	In process	Presentation of the project is pro February 2008.
xx.	CBR Town Mouza Lohi Bher, Zone V, Islamabad.	12-07-2008	IEE	In process	Site Monitoring is proposed.
xxi.	Construction and operation of Residence for Staff of High Commission of India, Diplomatic Enclave, Islamabad.	02-09-2008	IEE	In process	Conditional environmental approv for issuance.
xxii.	PEMRA Building, Islamabad.	09-09-2008	IEE	In process.	Presentation of the project is pro February 2008.
xxiii.	Construction and Operation of Workers Welfare Fund Secretariat Building, G- 10/4, Islamabad.	09-09-2008	IEE	In process.	Comments of review committee forwarded to the project proponent.
xxiv.	Oil & Gas Regulatory Authority Main Office, Islamabad.	25-09-2008	IEE	In process	Presentation of the project is pro February 2008.
xxv.	Petroleum House, Islamabad.	24-11-2008	IEE	In process	Presentation of the project is pro February 2008.
xxvi.	NEPRA Head Office Building at G-5/1, Islamabad.	19-12-2008	IEE	In process	Presentation of the project is pro February 2008.

S. No.	Name of Project	Date of Admission of Application	EIA / IEE	Status	Reasons
xxvii.	Construction of Access Road from Kuri Road Leading to the Plots allotted to PSEB, China Mobile and Agro Farming Scheme, North of N.I.H, Islamabad Project.	20-12-2008	IEE	In process	Under initial review process.
xxviii.	Power Distribution Enhancement Project.	27-01-2009	IEE	In process	Under initial review process.
xxix.	New Islamabad Airport	06-01-2009	Draft EIA	In process	Initial observations are forwarded to
xxx.	Zero Point Interchange	12-01-2009	Draft EIA	In process	Initial observations are forwarded to project proponent.
xxxi.	Al-Hamra Avenue Housing Scheme, Islamabad.	26-03-2008	EIA	In process	Public hearing issues are prepared to project proponent.

## **SUMMARY**

### **Position since 2003 till 04-02-2009**

1.	Total number of EIAs received	= 19
	Conditional Environmental Approval accorded	= 12
	Cases in process	= 7
2.	Total number of IEEs received	= 46
	Conditional Environmental Approval accorded	= 11
	Cases in process	= 30

3. Total number of CNG/Petrol cases received = 151  
 Conditional Environmental Approval accorded = 144  
 Cases in process = 07
4. Total Revenue generated/ collected by EIA/ Monitoring Directorate in respect of review/NOC fees and imposing Administrative penalty against the violators of Section 12 of Pakistan Environmental Protection Act, 1997. = 35, 00000 Rs. (3.5 Million)

### **Rejected IEE of Different Development Projects:**

Serial #	Name of Project	Date of Admission of Application	EIA / IEE	Review Fees Deposited	Remarks.
i.	Bahria Town Housing Scheme Project	20-08-2007	IEE	Rs.15,000	IEE report not accepted and advised the proponent to resubmit EIA.
ii.	Construction of Telecom Tower Project in Blue Area, Islamabad.	31-10-2006	IEE	Rs.15,000	IEE report not accepted and advised the proponent to resubmit EIA because it is a mega project in center of City.
iii.	Zero Point Interchange	-----	IEE	Rs. 15,000	IEE report not accepted and advised the proponent to resubmit EIA.
iv.	Dualization of Garden Avenue, Islamabad.	28-01-2008	IEE	Rs. 15,000	IEE not accepted.
v.	New Murree Project	-----	IEE	Rs. 15,000	IEE not accepted.
vi	Al-Hamra Avenue Housing Scheme, Islamabad.	21-08-2007	IEE	Rs. 15000	The proponent was directed to submit EIA

Serial #	Name of Project	Date of Admission of Application	EIA / IEE	Review Fees Deposited	Remarks.
					report.
vii.	2D Seismic Survey in Non-Sensitive areas of Margalla & Margalla North Blocks.	12-11-2007	IEE	Rs. 15,000	The proponent was directed to submit EIA report.
viii.	Construction of Margalla Avenue	06-03- 2008	IEE	Rs. 15,000	EIA is proposed for the said project.
ix.	Construction Of Muhammad Ali Jinnah University, Islamabad.	01-04- 2008	IEE	Rs. 15,000	EIA is proposed for the said project.
xix.	Construction of Zarkon Heights, Islamabad.	31-05-2008	IEE	Rs. 15000	EIA is proposed for the said project.

### Vehicle Emission Testing System (VETS):

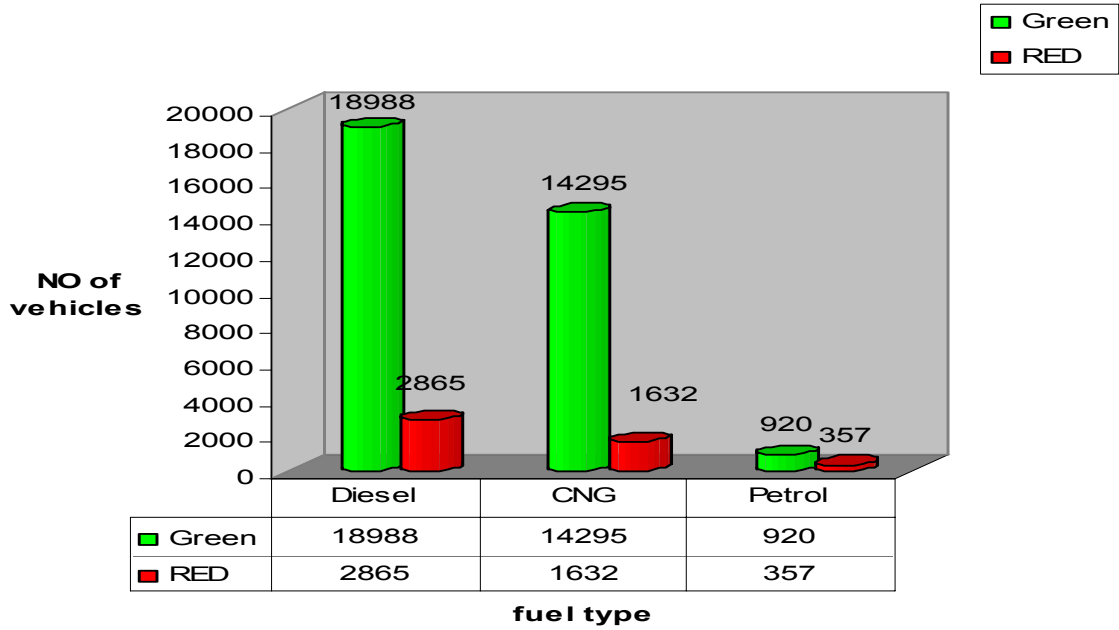
Vehicle Emission Testing in collaboration with city traffic police is a continuous activity. A successful pilot activity is already under way whereby in Islamabad, Pak EPA and Islamabad Traffic Police (ITP) has carried out emission test of **39,057** (Thirty Nine Thousand and Fifty Seven) vehicles since 2005,

out of which **34,203** (87.57 %) vehicles have been cleared and have accordingly been issued green stickers, **4,854** (12.43 %) vehicles causing pollution have been issued red (warning) stickers.

**Vehicular Emission Testing in Islamabad  
(May, 2005 - 31<sup>st</sup> September, 2008)**

<b>Fuel Type</b>	<b>Green/ Compliance</b>	<b>Red/Non Compliance</b>	<b>Total Checked Vehicles</b>
Diesel	18,988	2,865	21,853
CNG	14,295	1632	15,927
Petrol	920	357	1277
	34,203	4,854	39,057

**NO of vehicles vs fuel type**



## **Establishment of Environmental Monitoring System in Pakistan:**

Pak-EPA has also launched the Environmental Monitoring System project with collaboration of Government of Japan. Capital cost of project is Rs. 1,089.10 million and main objective of project is to establishing continuous air and water monitoring stations and mobile laboratories in major cities of Pakistan. Pak-EPA has also launched the project 'Establishment of Environmental Monitoring Station in Pakistan' (EMS) with the collaboration of Government of Japan.

Main objective of the project is to establish continuous air and water monitoring stations and mobile laboratories in major cities of Pakistan. Under this project, seven fixed and three mobile air monitoring stations have been established at Federal and Provincial EPAs. Stack emission monitoring vans are also being used to monitor the industrial stack emission. Mobile analytical laboratories for water are being used by EPAs to investigate the water quality. Apart from this, a new environmental laboratory at federal level and up gradation of all provincial EPAs laboratories has been completed. This would be followed by technical cooperation with JICA to enhance the capacities of EPAs in implementation of EMS in the country. Central Laboratory for Environmental Analysis and Networking (CLEAN) consists of a main laboratory, air and water lab data center and micro biological lab has been completed according to schedule and has been handed over to Pak-EPA on 31<sup>st</sup> March, 2007.

The constructed laboratory CLEAN is equipped with the state of art equipment capable of testing industrial and municipal effluent. It will work as the reference laboratory for Provincial EPAs and provide technical support to certified laboratories designated throughout Pakistan under the Act. New Technical staff has been recruited to enhance expertise in different environmental fields like Air and Water Quality Monitoring, toxic substances and microbiology.

### **Air Quality Monitoring System:**

The present Air Quality Monitoring System has been provided to the Federal and Provincial EPAs the details are as under:

#### **Air Quality Monitoring System (Established)\***

<b>Location</b>	<b>Fixed Monitoring Station</b>	<b>Mobile Monitoring Station</b>	<b>Data Collecting &amp; Analyzing Equipment</b>	<b>National Data Surveillance Center</b>
Islamabad	1(1)	1 (1)	-	1 (1)
Karachi	4 (2)	1 (1)	1 (1)	--
Lahore	4 (2)	1 (1)	1 (1)	--
Peshawar	2 (1)	--	1 (1)	--
Quetta	2 (1)	1 (0)	1 (1)	--
Total	13 (7)	4 (3)	4 (4)	1 (1)

\* Units established under Grant in Aid from Government of Japan during the fiscal year 2006-07.

The information regarding the data being generated by air monitoring stations is given on next page.

# Ambient Air Quality

Daily Mean Value (9<sup>th</sup> May, 2007)

Station	Nitrogen oxide	Nitrogen dioxide	Methane	Non-Methane Hydro Carbon	Carbon mono oxide	Sulphur-di-oxide	PM 2.5	Wind Spd	Wind Dir	Temp	Radiation
	ug/m3	ug/m3	ug/m3	ppb	ug/m3	ug/m3	ug/m3	m/s	Degree	Deg C	W/m2
Islamabad Fixed Station	54.50	46.00	2332.20	757.10	1.07	17.50	47.20	1.30	184.00	27.90	268.80
Islamabad Mobile Station	15.90	32.20	1745.60	630.40	0.69	10.30	43.70	0.90	226.00	28.50	284.00
Karachi Fixed Station 1	10.10	30.80	1448.7	308.2	0.43	21.90	77.90	1.20	290.00	340.00	286.40
Karachi Fixed Station 2	17.50	43.70	1777.50	299.50	0.56	18.00	65.6	3.90	281.00	32.70	278.40
Lahore Fixed Station 1	48.80	83.60	2519.30	1138.40	1.91	41.60	91.80	1.80	203.00	29.90	200.10
Lahore Fixed Station 2	6.90	33.70	1833.8	317.3	0.63	21.50	57.5	2.90	177.00	31.40	264.30
Quetta Fixed Station	3.20	18.80	1317.9	1504.7	0.44	6.60	206.4	1.00	220.00	20.20	289.50
Peshwar Fixed Station	29.80	53.30	3015.20	1973.60	1.21	22.00	185.5	1.10	155.00	29.40	267.90
Draft PAAQS	40	80			5	120	40				

ISD-AQI Quality Index)	(Air	Good	Moderate	Unhealthy for Sensitive group	Unhealthy	Very Unhealthy	Hazardous
		0 - 50	51 - 100	101 - 150	151 - 200	201 - 300	301 - 500

↑

# Ambient Air Quality

Daily Mean Value (20<sup>th</sup> September, 2007)

Station	Nitrogen oxide	Nitrogen-di-oxide	Methane	Non-Methane Hydro Carbon	Carbon mono oxide	Sulphur-di-oxide	PM 2.5	Wind Spd	Wind Dir	Temp	Radiation
	ug/m3	ug/m3	ug/m3	ppb	ug/m3	ug/m3	ug/m3	m/s	Degree	Deg C	W/m2
Islamabad Fixed Station	29.20	34.50	1706.90	194.80	0.79	2.00	30.60	1.20	134.00	26.40	184.00
Islamabad Mobile Station	8.20	26.80	1732.90	140.10	0.55	0.10	29.60	1.00	96.00	29.20	253.50
Karachi Station 1 Fixed	12.60	21.80	2256.4	305.5	0.38	7.90	105.00	1.70	280.00	29.30	236.10
Karachi Station 2 Fixed	19.40	28.90	3479.40	374.40	0.28	10.90	90	3.40	277.00	30.00	256.00
Lahore Station 1 Fixed	6.80	50.40	1732.30	461.00	0.87	16.60	85.50	1.10	300.00	32.90	528.00
Lahore Fixed Station 2	5.00	35.30	3453.1	358.2	1.05	46.50	99.6	1.40	258.00	30.40	264.90
Quetta Station Fixed	20.50	42.20	2704.6	762.3	1.28	21.40	106.4	1.20	213.00	21.30	257.00
Peshwar Fixed Station	15.10	33.10	4447.30	625.40	1.03	34.90	79.4	1.70	138.00	28.60	194.20
Draft PAAQS	40	80			5	120	40				

**ISD-AQI**  
(Air Quality Index)

Good	Moderate	Unhealthy for Sensitive group	Unhealthy	Very Unhealthy	Hazardous
0 - 50	51 - 100	101 - 150	151 - 200	201 - 300	301 - 500

↑  
AQI PM2.5 = 25.3

## **Self Monitoring and Reporting Programme (SMART)/ Green Industry Programme:**

Government of Pakistan notified National Environmental Quality Standards (NEQS) in August 1993 with an enforcement schedule for new industrial units from 1<sup>st</sup> July, 1994 and for existing units from 1<sup>st</sup> July, 1996 to combat pollution at source. SMART was launched on national basis on 8<sup>th</sup> March, 2006. Industries were provided with the SMART software. By implementing this system, the government has, in fact, transferred the responsibility for examining and evaluating industry's environmental performance to individual industrial facilities. Under the Self-Monitoring and Reporting System, industries in Pakistan will be responsible for systematically monitoring their environmental performance and reporting the data to Environmental Protection Agencies. About 120 industries have registered under SMART and concerned EPAs are getting industrial monitoring data on regular basis which is of great support in impact assessment. By implementing this system, the government will, in fact, transfer the responsibility for examining and evaluating industry's environmental performance to individual industrial facilities. Under the Self-Monitoring and Reporting System, industries in Pakistan will be responsible for systematically monitoring their environmental performance and reporting the data to Environmental Protection Agencies.

### **Monitoring of Transboundary Air Pollution:**

Air quality monitoring station comprising a Laboratory was established at Bahawal Nagar in January 2007 for Trans-boundary Air Pollution Monitoring under 'Malé Declaration on Control and Prevention of Air Pollution and Its likely Trans-boundary Effect for South Asia' which was adopted in the seventh meeting of the Governing Council of SACEP held in April 1998 in Malé.

Following activities are being undertaken under this programme:

- Wet and dry deposition analysis
- PM10, NRSPM & TSPM are analyzed at the Monitoring Site.
- Analysis of ambient air quality for SO<sub>2</sub> & NO<sub>2</sub> and Ozone
- Study entitled 'Crop Impact Assessment' has been done by Punjab University (nominated institute)
- Research Study- Level of Exposure of School Children to Air Pollutants undertaken in 2006