

The Sindh Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2014

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**GOVERNMENT OF SINDH
SINDH ENVIRONMENT PROTECTION
AGENCY**

Karachi dated the 16th December, 2014.

NOTIFICATION

No. **EPA/TECH/739/2014** :- In exercise of the powers conferred by section 36 of the Sindh Environmental Protection Act, 2014, Sindh Environmental Protection Agency with the approval of the Government of Sindh, is pleased to establish the following, rules, namely: -

1. **Short title and commencement.** (1) These rules may be called the Sindh Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2014.

(2) They shall come into force at once.

2. **Definitions.** - (1) In these rules, unless there is anything repugnant in the subject or context -
 - (a) **“Act”** means the Sindh Environmental Protection Act, 2014;
 - (b) **“Agency”** means the Sindh Environmental Protection Agency established under the Act;
 - (c) **“associated company”** and **“associated undertaking,”** shall have the same meaning as defined in the Companies Ordinance, 1984 (XLVII of 1984);
 - (d) **“certified environmental laboratory”** means an environmental laboratory which has been granted certification under the Sindh Environmental Protection Agency (Certification of Environmental Laboratories) Regulations, 2014;
 - (e) **“Director-General”** means the Director-General of the Agency;
 - (f) **“environmental monitoring report”** means the report submitted by an industrial unit to Agency in respect of priority parameters;
 - (g) **“industrial unit”** means any legal entity carrying on industrial activity;
 - (h) **“pollution level”** means number of units per unit of production determined under the Pollution Charge of Industry (Calculation and Collection) Rules, 2001;
 - (i) **“priority parameters”** means those parameters of the Sindh Environmental Quality Standards which have been selected for purposes of

submission of Environmental Monitoring Reports to the Agency by an industrial unit; and

(j) **“Schedule”** means the Schedule to these rules.

(2) All other words and expressions used but not defined in these rules shall have the same meanings as are assigned to them in the Act.

3. **Responsibility for reporting.** All industrial units shall be responsible for correct and timely submission of Environmental Monitoring Reports to the Agency.

4. **Classification of industrial units.** On the basis of the pollution level of an industrial unit, the Director General shall classify the unit into category “A”, “B” or “C” for liquid effluents, and category “A” or “B” for gaseous emissions:

Provided that till such time as the pollution level of an industrial unit is determined, it shall be classified according to the type of industry to which it belongs, as shown in Schedule-I, for liquid effluents and in Schedule-II, for gaseous emissions.

5. **Category “A” industrial units.** (1) An industrial unit in category “A” shall submit environmental monitoring reports on monthly basis -

(a) in respect of liquid effluents, for priority parameters listed in column 3 of Table “A” of Schedule-III:

Provided that during start-up or upset conditions, priority parameters mentioned in column 4 of Table “A” of Schedule-III shall be recorded on hourly basis;

(b) in respect of gaseous emissions, for priority parameters listed in Table “B” of Schedule-III.

(2) An industrial unit in category “A” shall maintain a record of the times during which start-up and upset conditions occur, and shall mention the total time elapsed in such conditions in its monthly environmental monitoring report.

6. **Category “B” industrial units.-** An industrial unit in category “B” shall submit environmental monitoring reports on quarterly basis -

(a) in respect of liquid effluents, for priority parameters listed in Table “A” of Schedule-IV;

(b) in respect of gaseous emissions, for priority parameters listed in Table “B” of Schedule-IV.

7. **Category “C” industrial units.** An industrial unit in category “C” shall submit environmental monitoring reports on biannual basis for priority parameters in respect of liquid effluents listed in Schedule-V.

8. **Special Industries.** (1) Without prejudice to the provisions of rule 4, the Director General may classify a large industrial unit with very high pollution levels as “Special Industry”.

(2) In addition to complying with the requirements of rule 5, a Special Industry shall submit environmental monitoring reports for such parameters and at such frequency as the Director General may require.

9. **Environmental Monitoring Report.** - (1) An environmental monitoring report shall comprise a liquid effluents monitoring report, a gaseous emissions monitoring report and a cover sheet which shall be in the form as set out in Forms A, B and C, respectively, of Schedule-VI.

(2) All measurements of priority parameters contained in the environmental monitoring report submitted by an industrial unit shall be based on test reports of a certified environmental laboratory, and attested copies of such results shall be attached with the environmental monitoring report:

Provided that such certified environmental laboratories shall not be part of, or an associated company or associated undertaking of, the said industrial unit; provided that the Agency may, for the purpose of confirmation of provided results, direct to take samples of effluents, emissions and waste on its own or by engaging any independent certified laboratory.

(3) The gaseous emissions report shall cover the priority parameters listed in Schedule-VII, and shall include, every two years, metal analysis of all gaseous emissions from the industrial unit.

10. **Sampling, testing and analysis.** Sampling testing and analysis of effluents, gaseous emissions and waste shall be carried out in accordance with the Environmental Samples Rules,2014.

11. **Monitoring conditions of EIA approval.** - The provisions of these rules shall be in addition to, and not in derogation of, the monitoring conditions laid down in an EIA approval.

12. **Compilation, analysis and management of data.** - The Agency shall compile, analyze and manage the data contained in the environmental monitoring reports with the objective, *inter alia*, of enforcing the Sindh Environmental Quality Standards and developing an environmental database.

13. **Repeal and Savings.** (1) The provisions of the National Environmental Quality Standard (Self-Monitoring and Report by Industry) Rules, 2001, to the extent of the Province of Sindh are hereby repealed.

(2) All orders made, notification issued, actions taken under the repealed Rules shall remain in force until amended, altered or repealed by the provisions of these Rules.

**DIRECTOR GENERAL
SINDH ENVIRONMENTAL PROTECTION
AGENCY**

Schedule I
(See rule 4)
Classification of Industrial Units for Liquid Effluents

1. **Category “A”**

- (1) Chlor-Alkali (Mercury Cell).
- (2) Chlor-Alkali (Diaphragm Cell).
- (3) Metal finishing and electroplating.
- (4) Nitrogenous fertilizer.
- (5) Phosphate fertilizer.
- (6) Pulp and paper.
- (7) Pesticides formulation.
- (8) Petroleum refining.
- (9) Steel industry.
- (10) Synthetic fiber.
- (11) Tanning and leather finishing.
- (12) Textile processing.
- (13) Pigments and dyes.
- (14) Thermal Power Plants (Oil Fired and Coal Fired).
- (15) Rubber products.
- (16) Paints, Varnishes and Lacquers.
- (17) Pesticides.
- (18) Printing.
- (19) Industrial chemicals.
- (20) Oil and Gas production.
- (21) Petrochemicals.
- (22) Combined effluent treatment.
- (23) Any other industry to be specified by Provincial Agency.

2. **Category “B”**

- (1) Dairy industry.
- (2) Fruit and vegetable processing.
- (3) Glass manufacturing.
- (4) Sugar.
- (5) Detergent.
- (6) Photographic.
- (7) Glue manufacture.
- (8) Oil and Gas exploration.
- (9) Thermal Power Plants (Gas Fired)
- (10) Vegetable oil and ghee mills.
- (11) Woolen mills.
- (12) Plastic materials and products.
- (13) Wood and cork products.
- (14) Any other industry to be specified by Sindh Environmental Protection Agency.

3. **Category “C”**

- (1) Pharmaceutical (Formulation) Industry.
- (2) Marble Crushing.
- (3) Cement.
- (4) Any other industry to be specified by Sindh Environmental Protection Agency

Schedule II

(See rule 4)

Classification of Industrial Units for Gaseous Emissions

1. Category “A”

- (1) Cement.
- (2) Glass manufacturing
- (3) Iron and steel.
- (4) Nitrogenous fertilizer.
- (5) Phosphate fertilizer.
- (6) Oil and Gas production.
- (7) Petroleum refining.
- (8) Pulp and paper.
- (9) Thermal Power Plants (coal and oil based)
- (10) Boilers, ovens, furnaces and kilns (coal and oil fired)
- (11) Brick-Kilns (firewood and bagasse based)
- (12) Any other industry to be specified by Sindh Environmental Protection Agency.

2. Category “B”

- (1) Sugar.
- (2) Textile.
- (3) Chloralkali plants.
- (4) Dairy industry.
- (5) Fruits and vegetables.
- (6) Metal finishing and electroplating.
- (7) Boilers, ovens, furnaces and kilns (gas-fired)
- (8) Any other industry to be specified by Sindh Environmental Protection Agency

Schedule III
[See rule 5(1)(a) and (b)]

Table A
Category "A"

Priority Parameters for Monitoring of Liquid Effluents

S.No.	Industry	Priority Parameters for Normal Plant Conditions to be Reported on a Monthly Basis ¹	Priority Parameters for Start-up and Upset Conditions to be Recorded on an Hourly Basis
1.	Chlor-Alkali (Mercury Cell)	Effluent flow, Temperature, pH, TSS, Chlorine, Mercury, Chlorides	Effluent Flow, Temperature, pH, TSS, Mercury, Chlorides
2.	Chlor-Alkali (Diaphragm Cell)	Effluent Flow, Temperature, pH, TSS, Chlorine, Chlorides	Effluent Flow, Temperature, pH, TSS, Chlorides
3.	Metal Finishing and Electroplating ²	Effluent Flow, Temperature, pH, TSS, Oil and Grease, Arsenic, Cadmium, Chromium (trivalent), Chromium (hexavalent), Lead, Nickel, Mercury, Silver Zinc, Fluorides, Cyanides	Effluent Flow, Temperature, pH, TSS,
4.	Nitrogenous Fertilizer	Effluent Flow Temperature, pH, TSS, Ammonia, COD	Effluent Flow, Temperature, pH, TSS,
5.	Phosphate Fertilizer	Effluent Flow, Temperature pH, TSS, Cadmium, Fluorides, COD	Effluent Flow, Temperature, pH, TSS,
6.	Pulp and paper	Effluent Flow, Temperature, pH, COD, TSS, TDS Sulphides, BOD5	Effluent Flow, Temperature, pH, TDS, TSS,
7.	Pesticides Formulation	Effluent Flow, Pesticides	Effluent Flow,
8.	Petroleum Refining	Effluent flow, Temperature, pH, COD, TSS, BOD5 Oil and Grease, phenolic compounds	Effluent Flow, Temperature, pH, TSS,
9.	Steel Industry ²	Effluent flow, Temperature, pH, COD, TSS, TDS, Chromium (trivalent), Iron, Oil and Grease, Cadmium Copper.	Effluent Flow, Temperature, pH, TSS,
10.	Synthetic Fiber	Effluent Flow, Temperature pH, COD TSS, BOD5, Oil and Grease, Sulphides	Effluent Flow, Temperature, pH, TSS,
11.	Tanning and Leather Finishing	Effluent Flow, Temperature, pH, COD, TSS, BOD5, Sulphide, Oil and Grease, Chromium (trivalent), Chromium (hexavalent), TDS, phenolic compounds	Effluent Flow, Temperature, pH, TSS,
12.	Textile Processing	Effluent Flow, Temperature, pH, COD, TSS, TDS, BOD5, Copper, Chromium	Effluent Flow Temperature, pH, TSS,

S.No.	Industry	Priority Parameters for Normal Plant Conditions to be Reported on a Monthly Basis.	Priority Parameters for Start-up and Upset Conditions to be Recorded on an Hourly Basis
13.	Pigments and Dyes	Effluent Flow, pH, Temperature, COD, lead, Copper, Zinc.	Effluent Flow, Temperature, pH,
14.	Thermal Power Plants (Oil fired and coal fired)	Effluent Flow, Temperature, pH, TSS, Oil and Grease	Effluent Flow, Temperature, pH, TSS
15.	Rubber Products	COD, Cadmium TSS	TSS
16.	Paints, Varnishes & Lacquers	PH, TSS, COD, Lead, Chromium, Cadmium, Zinc, Barium.	PH, TSS
17.	Pesticides	COD, Mercury, Pesticides	COD,
18.	Printing	COD, Lead	COD,
19.	Industrial Chemicals	PH, COD, TDS, Phenolic Compounds, Cyanide, Ammonia, Cadmium*, Chromium*, Mercury*, Nickel*, Zinc*, Arsenic*	PH, COD, TDS,
20.	Oil and Gas Production	Effluent Flow, Temperature, pH, COD, TSS, TDS, Oil and Grease, Chloride, BOD5, Phenolic Compounds	Effluent Flow, Temperature, pH, TSS, TDS,
21.	Petrochemicals	Effluent Flow, Temperature pH, COD TSS, TDS, Oil and Grease, BOD5, Phenolic Compounds	Effluent Flow, Temperature, pH, TSS, TDS,

1. Industry using chromium in its cooling water system will also report chromium (trivalent, hexavalent) in addition to the stipulated priority parameters for each sector.

2. Steel Industry includes steel-re-rolling mills, electric furnaces, and foundries.

* Priority parameters will be limited to those occurring in chemicals and raw-materials used.

Schedule IV

[See rule 6(a) and (b)]

Table A

Category "B"

Priority Parameters for Monitoring of Liquid Effluents

S. No.	Industry	Priority Parameters for Normal Plant Conditions to be Reported on a quarterly Basis¹
1.	Dairy Industry	Effluent Flow, Temperature, pH, BOD ₅ , TSS, TDS, Oil and Grease
2.	Fruit and Vegetable Processing	Effluent Flow, Temperature, pH, BOD ₅ , TSS, COD
3.	Glass Manufacturing	Effluent Flow, Temperature, pH, TSS, COD, Oil and Grease
4.	Sugar	Effluent Flow, Temperature, pH, BOD ₅ , TSS, COD, Oil and Grease
5.	Detergent	pH, COD, Oil and Grease, An-ionic Detergent
6.	Photographic	pH, COD, Silver, Cyanide, Fluoride
7.	Glue Manufacture	BOD, COD, pH.
8.	Oil and Gas Exploration	Effluent Flow, Temperature, pH, COD, TSS, TDS, Oil and Grease, Chloride, BOD ₅ , Phenolic compounds

1. Industry using chromium in its cooling water system will also report Chromium (trivalent, hexavalent) in addition to the stipulated priority parameters for each sector

Table B
Category "A"
Priority Parameters for Monitoring of Gaseous Emissions

Priority Parameters for Normal Plant Conditions to be reported on a Monthly basis	
S. No.	Industry
	<u>Process Emission</u> Particulates Particulates Particulates, Fluorides CO, NOx, SOx Ammonia, Particulates Ammonia, Flouride, Particulate CO, *SOx, NOx, H ₂ s and Particulates. H ₂ S, NOx, SOx, Particulates Chlorine, SOx
	<u>Emission from fired Equipment</u> CO, *SOx, NOx, Particulates CO, *SOx, NOx, Particulates CO, *SOx, NOx, Particulates CO, *SOx, NOx, Particulates CO, *SOx, NOx, Particulates *SOx, NOx, CO, Heavy Metals and Particulates CO, NOx, *SOx, Particulates.
1.	Cement
2.	Glass Manufacturing
3.	Iron and Steel
4.	Nitrogenous Fertilizers
5.	Phosphate Fertilizers
6.	Oil and Gas Production
7.	Petroleum Refining
8.	Pulp and Paper
9.	Thermal Power Plants (Coal and Oil based)
10.	Boilers, Ovens, Furnaces and Kilns (Coal and Oil fired)
11.	Brick Kilns (Firewood and Bagasse)

1. Metal analyses of all gaseous emission would be carried out once in two years.
 *Only where fuel contains hydrogen sulphide (H₂S) more than 20ppm

Table B
Category "B"
Priority Parameters for Monitoring of Gaseous Emission
Category "B"

S. No.	Industry	Priority Parameters for Normal Plant Conditions to be reported on a Quarterly Basis ¹	
		Process Emission	Emission from fired Equipment
1.	Sugar	Particulates	CO, *SO _x , NO _x , Particulates
2.	Textile		CO, *SO _x , NO _x , Particulates
3.	Chloralkali Plants	Chlorine	
4.	Dairy Industry		CO, NO _x , *SO _x , Particulates
5.	Fruits and Vegetables		CO, NO _x , *SO _x , Particulates
6.	Metal Finishing and Electroplating	Particulates	
7.	Boilers, Ovens, furnaces and Kilns (Gas-fired)		CO, NO _x

1. Meta! analyses of all gaseous emission would be carried out once in two years.

*Only where fuel contains hydrogen sulphide (H₂S) more than 20ppm

Schedule V
(See rule 7)
Category "C"
Priority Parameters for Monitoring of Liquid Effluents

S. No.	Industry	Priority Parameters for Normal Plant Conditions to be Reported on a quarterly Basis ¹
1.	Pharmaceutical (formulation industry, marble crushing, Cement, and any other industry as notified by EPAs	Effluent Flow, Temperature, pH, COD, TSS, TDS,
1.	Industry using chromium in its cooling water system	will also report chromium (trivalent, hexavalent) in addition to the stipulated priority parameters for each sector.

Schedule VI

FORM A

Liquid Effluents Monitoring Report

SMART Plant Database X

Monitored Effluents

Normal Conditions **SMART**

Sampling Information

Stream Sampling Date Sampling Time
 Location Temp. (C) Flow [m³/hr]

Reported Data

Period
 Reported Days Hrs Per Day

Laboratory

Name Address

Sample Analysis

Ammonia <input type="text"/> mg/l	Chlorine <input type="text"/> mg/l	Lead <input type="text"/> mg/l	Silver <input type="text"/> mg/l
Anionic Detergents <input type="text"/> mg/l	Chromium (Hexavalent) <input type="text"/> mg/l	Manganese <input type="text"/> mg/l	Sulfides <input type="text"/> mg/l
Arsenic <input type="text"/> mg/l	Chromium (Trivalent) <input type="text"/> mg/l	Mercury <input type="text"/> mg/l	TDS <input type="text"/> mg/l
Barium <input type="text"/> mg/l	COD <input type="text"/> mg/l	Nickel <input type="text"/> mg/l	Total Chromium <input type="text"/> mg/l
BOD5 <input type="text"/> mg/l	Copper <input type="text"/> mg/l	Oil and Grease <input type="text"/> mg/l	TSS <input type="text"/> mg/l
Boron <input type="text"/> mg/l	Cyanides <input type="text"/> mg/l	Pesticides <input type="text"/> mg/l	Zinc <input type="text"/> mg/l
Cadmium <input type="text"/> mg/l	Fluorides <input type="text"/> mg/l	pH <input type="text"/>	
Chlorides <input type="text"/> mg/l	Iron <input type="text"/> mg/l	Phenolic Compounds <input type="text"/> mg/l	

Province/Plant ID

PUNJAB IAAV

Schedule VI

FORM B

Gaseous Effluents Monitoring Report

SMART Plant Database

Monitored Emissions

Normal Conditions SMART

Sampling Information		Reported Data	
Process Emission Stack <input type="checkbox"/>	Sampling Date <input type="checkbox"/>	Time <input type="checkbox"/>	Period <input type="checkbox"/>
Location <input type="text"/>	Flow (m ³ /hr) <input type="checkbox"/>	Reported Days <input type="checkbox"/>	Hrs Per Day <input type="checkbox"/>
Laboratory			
Name <input type="text"/>	Address <input type="text"/>		

Sample Analysis

Ammonia <input type="checkbox"/> mg/m ³	Copper <input type="checkbox"/> mg/m ³	NOx <input type="checkbox"/> mg/m ³
Antimony <input type="checkbox"/> mg/m ³	Hydrogen Fluoride <input type="checkbox"/> mg/m ³	Particulates <input type="checkbox"/> mg/m ³
Arsenic <input type="checkbox"/> mg/m ³	Hydrogen Sulphide <input type="checkbox"/> mg/m ³	Smoke <input type="checkbox"/> Ringelman Scale
Cadmium <input type="checkbox"/> mg/m ³	Hydrogen Chloride <input type="checkbox"/> mg/m ³	SOx <input type="checkbox"/> mg/m ³
Chlorine <input type="checkbox"/> mg/m ³	Lead <input type="checkbox"/> mg/m ³	Zinc <input type="checkbox"/> mg/m ³
CO <input type="checkbox"/> mg/m ³	Mercury <input type="checkbox"/> mg/m ³	

Province/Plant ID	<input type="button" value="Edit"/>	<input type="button" value="Save"/>	<input type="button" value="Cancel"/>	<input type="button" value="Main"/>
PUNJAB 1AAV				

FORM C

Environmental Monitoring Report Cover Sheet

SMART Plant Database

X

Registration Information

SMART

Company			
Company Name	<input type="text"/>	Chief Executive	<input type="text"/>
Address 1	<input type="text"/>	Designation	<input type="text"/>
Address 2	<input type="text"/>	City Code	<input type="text"/>
City	<input type="text"/>	Post Code	<input type="text"/>
		E-mail	<input type="text"/>
		Phone	<input type="text"/>
		Fax	<input type="text"/>

Plant			
Plant Name	<input type="text"/>	Contact Person	<input type="text"/>
Address 1	<input type="text"/>	Designation	<input type="text"/>
Address 2	<input type="text"/>	City Code	<input type="text"/>
City	<input type="text"/>	District	<input type="text"/>
		E-mail	<input type="text"/>
		Phone	<input type="text"/>
		Fax	<input type="text"/>

Type			
Plant Type	<input type="text"/>		
Total Number of Streams	<input type="text"/>	Total Number of Combustion Stacks	<input type="text"/>
		Total Number of Process Stacks	<input type="text"/>
Plant Uses Chromium Based Chemicals for Water Treatment ? <input type="radio"/> Yes <input type="radio"/> No			

Province/Plant ID	
PUNJAB	1AAV

Edit	Save	Cancel	Main
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Schedule VII
[See rule 9(3)]
Priority Parameters for Monitoring of Gaseous Emissions

S. No.	Emission source	Priority Parameters 2 for Reporting
1.	Boiler, Ovens Furnaces and Kilns Gas Fired Oil Fired Coal Bagasee and Firewood Brick Kilns Thermal Power Plants Process Emission ¹	CO, NOx CO, NOx, SOX, Particulates CO, NOx, SOX, Particulates CO, Particulates CO, NOx, SOX, Particulates Sox, NOx, Particulates Particulates Ammonia, Chlorine, H2S, fluoride, SOx, NOx, Co, Mercury*, Lead*, Zinc*, Cadmium*, Arsenic*, Antimony*
2.		
3.		
4.		

1. Process emissions involving fuel combustion will also include parameters as for Boilers, Ovens, furnaces and Kilns.
 2. Metal analyses of all gaseous emissions would be carried out once in two years.
- * Priority parameters will be limited to those occurring in chemicals and raw-materials used.

F. No. 14 (3)/98-TO-PEPC

(SAEED ATHAR)
Section Officer

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Schedule VI

FORM A

Liquid Effluents Monitoring Report

SMART Plant Database



Monitored Effluents

Normal Conditions **SMART**

Sampling Information

Stream Sampling Date Sampling Time
 Location Temp. (C) Flow [m³/hr]

Reported Data

Period
 Reported Days Hrs Per Day

Laboratory

Name Address

Sample Analysis

Ammonia <input type="text"/> mg/l	Chlorine <input type="text"/> mg/l	Lead <input type="text"/> mg/l	Silver <input type="text"/> mg/l
Anionic Detergents <input type="text"/> mg/l	Chromium (Hexavalent) <input type="text"/> mg/l	Manganese <input type="text"/> mg/l	Sulfides <input type="text"/> mg/l
Arsenic <input type="text"/> mg/l	Chromium (Trivalent) <input type="text"/> mg/l	Mercury <input type="text"/> mg/l	TDS <input type="text"/> mg/l
Barium <input type="text"/> mg/l	COD <input type="text"/> mg/l	Nickel <input type="text"/> mg/l	Total Chromium <input type="text"/> mg/l
BOD5 <input type="text"/> mg/l	Copper <input type="text"/> mg/l	Oil and Grease <input type="text"/> mg/l	TSS <input type="text"/> mg/l
Boron <input type="text"/> mg/l	Cyanides <input type="text"/> mg/l	Pesticides <input type="text"/> mg/l	Zinc <input type="text"/> mg/l
Cadmium <input type="text"/> mg/l	Fluorides <input type="text"/> mg/l	pH <input type="text"/>	
Chlorides <input type="text"/> mg/l	Iron <input type="text"/> mg/l	Phenolic Compounds <input type="text"/> mg/l	

Province/Plant ID

PU: **SINDH**

Schedule VI

FORM B

Gaseous Effluents Monitoring Report

SMART Plant Database

Monitored Emissions

Normal Conditions SMART

Sampling Information		Reported Data	
Process Emission Stack <input type="checkbox"/>	Sampling Date <input type="checkbox"/>	Period <input type="checkbox"/>	
	Time <input type="checkbox"/>	Reported Days <input type="checkbox"/>	Hrs Per Day <input type="checkbox"/>
Location <input type="text"/>		Flow (m ³ /hr) <input type="text"/>	
Laboratory			
Name <input type="text"/>		Address <input type="text"/>	

Sample Analysis

Ammonia <input type="text"/> mg/m ³	Copper <input type="text"/> mg/m ³	NOx <input type="text"/> mg/m ³
Antimony <input type="text"/> mg/m ³	Hydrogen Fluoride <input type="text"/> mg/m ³	Particulates <input type="text"/> mg/m ³
Arsenic <input type="text"/> mg/m ³	Hydrogen Sulphide <input type="text"/> mg/m ³	Smoke <input type="text"/> Ringelman Scale
Cadmium <input type="text"/> mg/m ³	Hydrogen Chloride <input type="text"/> mg/m ³	SOx <input type="text"/> mg/m ³
Chlorine <input type="text"/> mg/m ³	Lead <input type="text"/> mg/m ³	Zinc <input type="text"/> mg/m ³
CO <input type="text"/> mg/m ³	Mercury <input type="text"/> mg/m ³	

Province/Plant ID	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	PUNJAB	SINDH	edit	Save
			Cancel	Main

FORM C

Environmental Monitoring Report Cover Sheet

SMART Plant Database

X

Registration Information

SMART

Company			
Company Name	<input type="text"/>	Chief Executive	<input type="text"/>
Address 1	<input type="text"/>	Designation	<input type="text"/>
Address 2	<input type="text"/>	City Code	<input type="text"/>
City	<input type="text"/>	Post Code	<input type="text"/>
		E-mail	<input type="text"/>
		Phone	<input type="text"/>
		Fax	<input type="text"/>

Plant			
Plant Name	<input type="text"/>	Contact Person	<input type="text"/>
Address 1	<input type="text"/>	Designation	<input type="text"/>
Address 2	<input type="text"/>	City Code	<input type="text"/>
City	<input type="text"/>	District	<input type="text"/>
		E-mail	<input type="text"/>
		Phone	<input type="text"/>
		Fax	<input type="text"/>

Type			
Plant Type	<input type="text"/>		
Total Number of Streams	<input type="text"/>	Total Number of Combustion Stacks	<input type="text"/>
		Total Number of Process Stacks	<input type="text"/>
Plant Uses Chromium Based Chemicals for Water Treatment ? <input type="radio"/> Yes <input type="radio"/> No			

Province/Plant ID	
PUNJAB	SINDH
<input type="button" value="Edit"/>	<input type="button" value="Save"/>
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Schedule VII
[See rule 9(3)]
Priority Parameters for Monitoring of Gaseous Emissions

S. No.	Emission source	Priority Parameters 2 for Reporting
1.	Boiler, Ovens Furnaces and Kilns Gas Fired Oil Fired Coal Bagasse and Firewood Brick Kilns Thermal Power Plants Process Emission ¹	CO, NOx CO, NOx, SOX, Particulates CO, NOx, SOX, Particulates CO, Particulates CO, NOx, SOX, Particulates Sox, NOx, Particulates Particulates Ammonia, Chlorine, H2S, fluoride, SOx, NOx, Co, Mercury*, Lead*, Zinc*, Cadmium*, Arsenic*, Antimony*
1.	Process emissions involving fuel combustion will also include parameters as for Boilers, Ovens, furnaces and Kilns.	
2.	Metal analyses of all gaseous emissions would be carried out once in two years.	
*	Priority parameters will be limited to those occurring in chemicals and raw-materials used.	