

1. State Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2009

**Azad Government of the State of Jammu & Kashmir
Planning and Development Department
Environmental Protection Secretariat**

‘Muzaffarabad’

Dated: April 11, 2009

NOTIFICATION

No. 1157-67/P&DD/Gen/2009. In exercise of the powers conferred by Section 30 of the Azad Jammu & Kashmir Environmental Protection Act, 2000 (IV of 2000), the Government is pleased to make the following rules, namely:—

1. **Short title and commencement:**— (1) These rules may be called the *State Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2009*.
(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 Azad Jammu and Kashmir ‘Environmental Protection’ Act, 2000 (IV of 2000);
 - (b) **“Agency”** means Azad Jammu & Kashmir Environmental Protection Agency established under Section 5 of 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 AJK Environmental Protection Agency (Certification of Environmental Laboratories) Regulations, 2000;
 - (e) **Director-General”** means the Director-General of the Agency;
 - (f) **“Environmental monitoring report”** means the report submitted by an industrial unit to the Agency in respect of priority parameters;
 - (g) **“Government”** means the Azad Government of the State of Jammu and Kashmir;
 - (h) **“Industrial Unit”** means any legal entity carrying on industrial activity;
 - (i) **“Pollution level”** means the number of units per unit of production determined under the Pollution Charge for Industry (Calculation and Collection) Rules, 2009;

- (j) **“Priority parameters”** means those parameters of the National Environmental Quality Standards which have been selected for purposes of submission of Environmental Monitoring Reports to the Agency by an industrial unit; and
- (k) **“Schedule”** means the Schedule to these rules.
- (2) All other words and expression used in these rules but not defined herein 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 times 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.
- (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, 2009.
- 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 national Environmental Quality Standards and developing an environmental database.

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 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 Agency.

3. Category "C"

- (1) Pharmaceutical (Formulation) Industry.
- (2) Marble Crushing.
- (3) Cement.
- (4) Any other industry to be specified by 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 (fire-wood and bagasse based).
- (12) Any other industry to be specified by 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 the 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	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, Chloride	Effluent Flow, Temperature, pH, TSS, Mercury,
2.	Chlor-Alkali (Diaphragm Cell)	Effluent Flow, Temperature, pH, TSS, Chlorine, Chlorides	Effluent Flow, Temperature, pH, TSS, Chlorides
3.	Metal Finishing and Electroplating ¹	Effluent Flow, Temperature, pH, TSS, Oil and Grease, Arsenic, Cadmium, Chromium (trivalent), Chromium (hexavalent),	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, Sulfides, BOD	Effluent Flow, Temperature, pH, TDS, TSS
7.	Pesticides Formulation	Effluent Flow, Pesticides	Effluent Flow
8.	Petroleum Refining	Effluent Flow, Temperature, pH, COD, TSS, BOD, Oil and Grease, phenolic compounds	Effluent Flow, Temperature, pH, TSS
9.	Steel Industry ²	Effluent Flow, Temperature, pH, COD, TSS, TDS, Chromium (trivalent),	Effluent Flow, Temperature, pH, TSS
10.	Synthetic Fiber	Effluent Flow, Temperature, pH, COD, TSS, BOD, Oil and Grease, Sulfides	Effluent Flow, Temperature, pH, TSS
11.	Tanning and Leather Finishing	Effluent Flow, Temperature, pH, COD, TSS, BOD, Sulfide, Oil and Grease, Chromium (trivalent), Chromium (hexavalent), TDS, phenolic	Effluent Flow, Temperature, pH, TSS
12.	Textile Processing	Effluent Flow, Temperature, pH, COD, TSS, TDS, BODS, Copper,	Effluent Flow, Temperature, pH, TSS

13	Pigments and Dyes	Effluent Flow, pH, Temperature, COD, Lead, Copper, Zinc.	Effluent Flow, Temperature, pH
14.	Thermal Power Plants (Oil fired and	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*,	pH, COD, TDS
20.	Oil and Gas Production	Effluent Flow, Temperature, pH, COD, TSS, TDS, Oil and Grease, Chloride, BOD, Phenolic Compounds	Effluent Flow, Temperature, pH, TSS, TDS
21.	Petrochemicals	Effluent Flow, Temperature, pH, COD, TSS, TDS, Oil and Grease, BOD, 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.

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

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

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

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, TSS, TDS, Oil and Grease
2.	Fruit and Vegetable Processing	Effluent Flow, Temperature, pH, BOD, TSS, COD
3.	Glass Manufacturing	Effluent Flow, Temperature, pH, TSS, COD, Oil and Grease
4.	Sugar	Effluent Flow, Temperature, pH, BOD, 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, Phenolic compounds

¹Industry 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 "B"
Priority Parameters for Monitoring of Gaseous Emission

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

¹Metal 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,

¹Industry 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
Monitored Effluents
SMART**

Normal Conditions

Sampling Information

Stream Sampling Date

Location Temp. (C) Flow (m3/ht)

Reported Data

Period

Reported Days Hrs Per Day

Laboratory

Name Address

**Sampling Information
Reported Data**

Sampling Analysis

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

Province/Plant ID

Schedule VI

FORM B

Gaseous Effluents Monitoring Report

**SMART Plant Database
Monitored Effluents
SMART**

Normal Conditions

Sampling Information

Process Emission Stack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sampling Data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Time	<input type="checkbox"/>
Location							Flow (m ³ /hr)		

Reported Data

Period		
Reported Days	<input type="checkbox"/>	Hrs Per Day <input type="checkbox"/>

Laboratory

Name	<input type="text"/>	Address	<input type="text"/>
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Sampling Analysis

Ammonia	<input type="checkbox"/>	mg/nm ³	Copper	<input type="checkbox"/>	Mg/ L	NOx	<input type="checkbox"/>	mg/nm ³
Antimony	<input type="checkbox"/>	mg/nm ³	Hydrogen Fluoride	<input type="checkbox"/>	Mg/ L	Particulates	<input type="checkbox"/>	mg/nm ³
Arsenic	<input type="checkbox"/>	mg/nm ³	Hydrogen Sulphide	<input type="checkbox"/>	Mg/ L	Smoke	<input type="checkbox"/>	Ringleman Scale
Cadmium	<input type="checkbox"/>	mg/nm ³	Hydrogen Chloride	<input type="checkbox"/>	Mg/ L	SOx	<input type="checkbox"/>	mg/nm ³
Chlorides	<input type="checkbox"/>	mg/nm ³	Lead	<input type="checkbox"/>	Mg/ L	Zinc	<input type="checkbox"/>	mg/nm ³
CO	<input type="checkbox"/>	mg/nm ³	Mercury	<input type="checkbox"/>	Mg/ L			

Province/Plant ID

<input type="text"/>	<input type="button" value="Edit"/>	<input type="button" value="Save"/>	<input type="button" value="Cancel"/>	<input type="button" value="Main"/>
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Schedule VII
[See rule 9(3)]
Priority Parameters for Monitoring of Gaseous Emissions

S. No.	Emission source	Priority parameters for Reporting
1.	Boiler, Ovens Furnaces and Kilns	CO, NO _x
	Gas Fired	CO, NO _x , SO _x , Particulates
	Oil Fired	CO, Particulates
	Coal	CO, NO _x , SO _x , Particulates
	Bagasse and Fire	SO _x , NO _x , Particulates
2.	Brick Kilns	Particulates Ammonia, Chlorine, H ₂ S,
3.	Thermal Power Plants	Fluoride, SO _x , NO _x , Co, Mercury*.
4.	Process Emission ²	Lead*, Zinc*, Cadmium*, Arsenic*, Antimony*

¹Priority parameters will be limited to those occurring in chemicals and raw-materials used

²Process emissions involving fuel combustion will also include parameters as for Boilers, Ovens, furnaces and Kilns.

*Metal analyses of all gaseous emissions would be carried out once in two years.

Copy to:

1. Secretary to the President, GoAJK.
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3. PS to Minister Environment., GoAJK.
4. PS to the Chief Secretary, GoAJK.
5. PS to the Additional Chief Secretary (Gen.), GoAJK.
6. PS to the Senior Member Board of Revenue, GoAJK.
7. PS to the Additional Chief Secretary (Dev.), GoAJK.
8. PS to the Director General Environment, GoAJK.
9. The Accountant General, Azad Kashmir.
10. The Controller, Govt. Printing Press, Muzaffarabad.
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Section Officer