Ministerial Decree No. KEP-51/MENLH/10/1995

The Liquid Waste Quality Standard for Industrial Activities

Decree of the State Minister of Environmental Affairs

Number: KEP-51/MENLH/10/1995 Dated: 23 October 1995

The State Minister of Environmental Affairs

Considering:

a. that to conserve the environment so that it shall continue to be beneficial to man's life and living and the lives and living of other living creatures, it is necessary to control the disposal of liquid waste into the environment;

b. that industrial activities have a potential to cause environmental pollution and therefore it is necessary to control the disposal of liquid waste by stipulating the Liquid Waste Quality Standard;

c. that to implement the control of water contamination as has been stipulated in Article 15 of Government Regulation No. 20/1990 on Water Contamination Control, it is necessary to lay down further stipulation in a Decree of the State Minister of Environmental Affairs on the Liquid Waste Quality Standard for Industrial Activities;

In view of:

1. The Nuisance Act (Hinder Ordonnantie) of 1926, Stbl. No. 226, after being amended and supplemented the latest by Stbl. No. 450/1940;

2. Law No. 5/1974 on the Principles of Administration in Regions (Statute Book No. 38/1974, Supplement to Statute Book No. 3037);

3. Law No. 11/1974 on Irrigation (Statute Book No. 65/1974, Supplement to Statute Book No. 3046);

4. Law No. 4/1982 on Basic Stipulations on Environmental Management (Statute Book No. 12/1982, Supplement to Statute Book No. 3215);

5. Law No. 5/1984 on Industrial Affairs (Statute Book No. 22/1984, Statute Book No. 3257);

6. Law No. 9/1985 on **Fisheries** (Statute Book No. 46/1985, Supplement to Statute Book No. 3299);

7. Government Regulation No. 22/1982 on Water Regulation System (Statute Book No. 37/1982, Supplement to Statute Book No. 3225);

8. Government Regulation No. 20/1990 on Water Contamination Control (Statute Book No. 24/1990, Supplement to Statute Book No. 3409);

9. Government Regulation No. 35/1991 on Rivers (Statute Book No. 44/1991, Supplement to Statute Book No. 3445);

10. Government Regulation No. 51/1993 on the Analysis of Environmental Impacts (Statute Book No. 84/1993, Supplement to Statute Book No. 3538);

11. Presidential Decree No. 96/M/1993 on the Establishment of Development Cabinet VI;

12. Presidential Decree No. 44/1993 on the Main Tasks, the Function and the Working System of State Ministers and the Organizational Structure of the Staff of State Ministers;

13. Presidential Decree No. 77/1994 on the Agency for the Control of Environmental Impacts.

Decides

To stipulate:

The Decree of the State Minister of Environmental Affairs on the Liquid Waste Quality Standard for Industrial Activities

Article 1

Referred to in this ministerial decree as:

1. An industry shall be an economic activity processing raw materials, half-finished goods and/or finished goods into goods having a higher value in terms of their use, including the activities of industrial design and engineering;

2. A Liquid Waste Quality Standard shall be the maximum limit of liquid waste permitted for disposal into the environment;

3. Liquid waste shall be waste in liquid form generated by an industrial activity, disposed of into the environment and assumed to be able to lower the quality of the environment;

4. A Liquid Waste Quality shall be the condition of the liquid waste expressed in debit, content and load of contamination;

5. Maximum Debit shall be the highest debit still permitted for disposal into the environment;

6. Maximum Content shall be the highest content still permitted for disposal into the environment;

7. Maximum Contamination Load shall be the highest load permitted for disposal into the environment;

8. The Minister shall be the Minister assigned to manage the environment;

9. Bapedal shall be the Agency for the Control of Environmental Impacts;

10. The governor shall be the Governor/Head of a First-Level Region, the Governor/Head of the Special Region of Capital City or the Governor/Head of an Extraordinary Region.

Article 2

(1) The liquid waste quality standard for the industrial activities of:

1. Caustic soda/chlor shall be as specified in Attachment A I and Attachment B I.

2. Metal coating shall be as specified in Attachment A II and Attachment B II.

3. Leather tanning shall be as specified in Attachment A III and Attachment B III.

4. Palm oil shall be as specified in Attachment A IV and Attachment B IV.

5. Pulp and paper shall be as specified in Attachment A V and Attachment B V.

6. Rubber shall be as specified in Attachment A VI and Attachment B VI.

7. Sugar shall be as specified in Attachment A VII and Attachment B VII.

8. Tapioca shall be as specified in Attachment A VIII and Attachment B VIII.

9. Textile shall be as specified in Attachment A IX and Attachment B IX.

10. Urea/nitrogen fertilizer shall be as specified in Attachment A X and Attachment B X.

11. Ethanol shall be as specified in Attachment A XI and Attachment B XI.

12. Mono Sodium Glutamate (MSG) shall be as specified in Attachment A XII and Attachment B XII.

13. Plywood shall be as specified in Attachment A XIII and Attachment B XIII.

14. Milk and foods made of milk shall be as specified in Attachment A XIV and Attachment B XIV.

15. Light drinks shall be as specified in Attachment A XV and Attachment B XV.

16. Soap, detergent and vegetable oil products shall be as specified in Attachment A XVI and Attachment B XVI.

17. Beer shall be as specified in Attachment A XVII and Attachment B XVII.

18. Dry cell batteries shall be as specified in Attachment A XVIII and Attachment B XVIII.

19. Paints shall be as specified in Attachment A XIX and Attachment B XIX.

20. Pharmacy shall be as specified in Attachment A XX and Attachment B XX.

21. Pesticides shall be as specified in Attachment A XXI and Attachment B XXI.

(2) The Liquid Waste Quality Standards for the types of industries as referred to in sub-article (1) of this article are stipulated on the basis of the contamination load and content, with the exception of the pharmaceutical industry and the industry of pesticides of packing formulation as referred to in sub-article (1) point 20 and point 21 of this article which are stipulated on the basis of content.

(3) The types of industry as referred to in sub-article (1) of this article which:

a. are already operational prior to the issuance of this decree shall be subject to the Liquid Waste Quality Standard as referred to in Attachment A and shall be obligated to fulfil the Liquid Waste Quality Standard as referred to in Attachment B at the latest by January 1, 2000.

b. whose planning stage is under way prior to the issuance of this decree and which shall be operational after the issuance of this decree shall be subject to the Liquid Waste Quality Standard in Attachment A and shall be obligated to fulfil the Liquid Waste Quality Standard in Attachment B at the latest by January 1, 2000.

(4) The Liquid Waste Quality Standard as referred to in Attachment B shall be applicable to the types of industrial activities as referred to in sub-article (1) of this article whose planning stage and operation shall begin after the issuance of this decree.

(5) The Liquid Waste Quality Standard as referred to in the Attachment to this Decree cannot at any time be exceeded.

(6) The calculation regarding the maximum debit of liquid waste and the maximum contamination load shall be as specified in Attachment D to this decree.

(7) The Liquid Waste Quality Standard as referred to in sub-article (1) to this article shall be reviewed periodically at least once in five years.

Article 3

(1) After consulting other Ministers and/or the management of non-ministerial government institutions concerned, the Minister shall stipulate the Liquid Waste Quality Standard for the types of industries outside the types of industries as referred to in Article 2 sub-article (1).

(2) As long as the Liquid Waste Quality Standard as referred to in sub-article (1) of this article has no been stipulated, the Governor may use the Liquid Waste Quality Standards as referred to in Attachment C to this decree.

(3) The Governor may adjust the number of parameters as referred to in sub-article (2) of this article after an approval has been obtained from the Minister.

(4) The Governor may stipulate additional parameters over and above the parameters contained in the Liquid Waste Quality Standard as referred to in Attachments A and B to this decree after an approval has been obtained from the Minister.

(5) The Minister shall give his response/and or approval at the latest within a period of 30 (thirty) working days as from the date of the receipt of the application as referred to in sub-articles (3) and (4) of this article.

(6) If within the period as referred to in sub-article (5) of this article no response and/or approval is given, the said application shall be considered as having been accepted.

Article 4

(1) The Governor can stipulate a Liquid Waste Quality Standard which is tighter than the stipulation as referred to in the Attachments to this Decree.

(2) If the Governor does not stipulate a Liquid Waste Quality Standard which is tighter than or the same as the Liquid Waste Standard as referred to in the Attachments to this Decree, the Liquid Waste Quality Standard specified in this Decree shall apply.

Article 5

If the analysis of the impacts on the environment of industrial activities requires that the Liquid Waste Quality Standard should be tighter than the Liquid Waste Quality Standard as referred to in Article 4, a Liquid Waste Quality Standard as required by the analysis of the impacts on the environment shall be stipulated for these industrial activities.

Article 6

Every party assuming responsibility for the industrial activities as referred to in Article 2 sub-article (1) of this article shall be obligated:

a. to manage liquid waste so that the quality of the liquid waste disposed into the environment shall not exceed the Liquid Waste Quality Standard already stipulated;

b. to make a liquid waste disposal sewer which shall be waterproof so that there shall not be the permeation of liquid waste into the environment;

c. to install a gauge to measure the debit or the flowing rate of liquid waste and take records of the daily debit of the liquid waste;

d. not to dilute liquid waste, including mixing disposed water from cooling systems into the liquid waste disposal flow;

e. to have the contents of the parameters of Liquid Waste Quality Standard as referred to in the Attachments to this Decree checked periodically at least once a month;

f. to separate a liquid waste disposal sewer from that for the overflow of rainwater;

g. take records of actual production;

h. submit a report on the records of daily debit, contents of parameters of the Liquid Waste Quality Standard, actual daily production as referred to in letters c, e, g at least once in three months to the Head of Bapedal, the Governor and the government agencies which technically supervise industries and other government agencies considered necessary pursuant to the prevailing laws.

Article 7

It is obligatory that the requirements as referred to in Articles 4 and 5 of this Decree and the requirements in Article 26 of Government Regulation No. 20/1990 on the Control of Water Contamination should be mentioned in the Nuisance Act (Hinder Ordonnantie) permit.

Article 8

If the types of industrial activities as referred to in Article 2 sub-article (1) have been stipulated prior to this decree and

a. the Liquid Waste Quality Standard is tighter than or the same as the Liquid Waste Quality Standard as referred to in this Attachments to this Decree, the Liquid Waste Quality Standard shall remain valid;

b. the Liquid Waste Quality Standard is more lax than the Liquid Waste Quality Standard as referred to in the Attachments to this Decree, it is obligatory that the Liquid Waste Quality Standard should be adjusted to the Liquid Waste Quality Standard in this decree at the latest 1 (one) year after the stipulation of this decree.

Article 9

With the enforcement of this decree, the Decree of the State Minister of Population and Environmental Affairs No.: KEP-03/MENKLH/11/1991 on the Liquid Waste Quality Standard for Activities Already Operational shall be declared null and void.

Article 10

This decree shall take effect as from the date of stipulation.

Stipulated in Jakarta

On October 23, 1995

The State Minister of Environmental Affairs

sgd.

Sarwono Kusumaatmadja

Attachment A.I: Decree of the State Minister of Environmental Affairs Number: KEP-51/MENLH/10/1995 On: The Liquid Waste Quality Standard for Industrial Activities Dated: October 23, 1995

The Liquid Waste Quality Standard for Caustic Soda Industries

_____

l l l l

l l Mercury (Hg) Process l Membrane/Diaphragm l

l l l Process l

l Parameters l_____l_____l

l l l l l l

l l Maximum l Maximum l Maximum l Maximum l

l l Content l Contamination l Content l Contamination l

l l (mg/L) l Load l (mg/L) l Load (kg/ton) l

l_____l_____l_____l_____l_____l

l l l l l

l COD l 150 l 1.5 kg/ton l 150 l 1.5 l

l_____l_____l_____l_____l_____l

l l l l l

l TSS l 50 l 0.5 kg/ton l 50 l 0.5 l

l_____l_____l_____l_____l_____l

l l l l l

l Mercury (Hg) l 0.005 l 0.05 g/ton l --- l --- l

l_____l_____l_____l_____l_____l

l l l l l

l Lead (Pb) l --- l --- l 3.0 l 0.03 l

l_____l_____l_____l_____l_____l

l l l l l

l Copper (Cu) l --- l --- l 0.3 l 0.003 l

l_____l_____l_____l_____l_____l

l l l l l

l Zinc (Zn) l -- l -- l 2.0 l 0.02 l

l_____l_____l_____l_____l_____l

l l l l

l pH l 6.0 - 9.0 l 6.0 - 9.0 l

l_____l_____l_____l

l l l l

l Maximum l 10 m[3] per ton of l 10 m[3] per ton of l

l Waste Debit l caustic soda product l caustic soda product l

l (rate of l l l

l flow) l l l

l_____l_____l_____l

Note:

1. The maximum content for each parameter in the table above is expressed in milligramme parameter per liter of

waste water.

2. The maximum contamination load for each parameter in the table above is expressed in kg or gramme parameter per

ton of caustic soda product.

Attachment A.II

The Liquid Waste Quality Standard for Metal Coating Industries

_____

l l l l

l l Copper (Cu) Coating l Nickel (Ni) Coating l

l Parameters l_____l_____l

l l l l l l

l l Maximum l Maximum l Maximum l Maximum l

l l Content l Contamination l Content l Contamination l

l l l Load l l Load l

l l (mg/L) l (gramme/m[3]) l (mg/L) l (gramme/m[3]) l

l_____l_____l_____l_____l_____l

l l l l l l

l TSS l 60 l 60 l 60 l 6.0 l

l_____l_____l_____l_____l_____l

l l l l l l

l Cadmium (Cd) l 0.05 l 0.005 l 0.05 l 0.005 l

l_____l_____l_____l_____l_____l

l l l l l l

l Cyanide (CN) l 0.5 l 0.05 l 0.5 l 0.05 l

l_____l_____l_____l_____l_____l

l l l l l l

l Total Metal l 8.0 l 0.8 l 8.0 l 0.8 l

l_____l_____l_____l_____l_____l

l l l l l l

l Copper (Cu) l 3.0 l 0.3 l --- l --- l

l_____l_____l_____l_____l_____l

l l l l l l

l Nickel (Ni) l --- l --- l 5.0 l 0.5 l

l_____l_____l_____l_____l_____l

l l l l

l pH l 6.0 - 9.0 l 6.0 - 9.0 l

l_____l_____l_____l

l l l l

l Maximum l 100 L per m[3] of l 100 L per m[3] of l

l Waste Debit l metal-coating product l metal coating product l

l_____l_____l_____l

_____

l l l l

l l Chrome (Cr) Coating l Zinc (Zn) Coating & l

l l l Galvanizing l

l Parameters l_____l_____l

l l l l l l

l l Maximum l Maximum l Maximum l Maximum l

l l Content l Contamination l Content l Contamination l

l l l Load l l Load l

l l (mg/L) l (gramme/m[3]) l (mg/L) l (gramme/m[3]) l

l_____l_____l_____l_____l_____l

l l l l l l

l TSS l 60 l 60 l 60 l 6.0 l

l_____l_____l_____l_____l_____l

l l l l l l

l Cadmium (Cd) l 0.05 l 0.005 l 0.05 l 0.005 l

l_____l_____l_____l_____l_____l

l l l l l l

l Cyanide (CN) l 0.5 l 0.05 l 0.5 l 0.05 l

l_____l_____l_____l_____l_____l

l l l l l l

l Total Metal l 8.0 l 0.8 l 8.0 l 0.8 l

l_____l_____l_____l_____l_____l

l l l l l l

l Total Chrome l 2.0 l 0.2 l --- l --- l

l (Cr) l l l l l

l_____l_____l_____l_____l_____l

l l l l l l

l Chrome Hexa- l 0.3 l 0.03 l --- l --- l

l Valence l l l l l

l (Cr[6]) l l l l l

l_____l_____l_____l_____l_____l

l l l l l l

l Zinc (Zn) l --- l --- l 2.0 l 0.2 l

l_____l_____l_____l_____l_____l

l l l l

l pH l 6.0 - 9.0 l 6.0 - 9.0 l

l_____l_____l_____l

l l l l

l Maximum l 100 L per m[3] of l 100 L per m[3] of l

l Waste Debit l metal-coating product l metal coating product l

l_____l_____l_____l

Note:

1. The maximum content for each parameter in the table above is expressed in milligramme parameter per liter of

waste water.

2. The maximum contamination load for each parameter in the table above is expressed in gramme parameter per me[2]

of metal-coating product.

Attachment A.III The Liquid Waste Quality Standard for Leather-Tanning Industries

Parameters	Maximum Content (mg/L)	Maximum Contamination Load (kg/ton)
BOD(5)	150	10.5
COD	300	21.0
TSS	150	10.5
Sulfide (as H(2)S)	1.0	0.07
Total Chrome (Cr)	2.0	0.14
Oil and Fat	5.0	0.35

l_____l_____l_____l

l l l l

l Total Ammonia l 10.0 l 0.70 l

l_____l_____l_____l

l l l

l pH l 6.0 - 9.0 l

l_____l_____l

l l l

l Maximum waste debit l 70 m[3] per ton of raw material l

l_____l_____l

Note:

1. The maximum content for each parameter in the table above is expressed in milligramme parameter per liter of

waste water.

2. The maximum contamination load for each parameter in the table above is expressed in kg parameter per ton (the

salting of raw hides).

Attachment A.IV The Liquid Waste Quality Standard for Palm-Oil Industries

_____

l l l l

l Parameters l Maximum Content l Maximum Contamination Content l

l l (mg/L) l (kg/ton) l

BOD(5)	250	1.5
COD	500	3.0
TSS	300	1.8
Oil and Fat	30	0.18
Total Ammonia (as NH(3)-N	20	0.12
pH	6.0 - 9.0	
Maximum waste debit	6 m(3) per ton of product	

Note: 1. The maximum content for each parameter in the table above is expressed in milligramme parameter per liter of waste water. 2. The maximum contamination load for each parameter in the table above is expressed in kg parameter per ton of palm-oil product.