
***** OFFICIAL ANNOUNCEMENT *******AGRICULTURE****THE DEPARTMENT OF AGRICULTURE****DECREE OF THE MINISTER OF AGRICULTURE****NUMBER : 818/Kpts/RC.220/10/98****DATED : OCTOBER 8, 1998****R E****REPORTS ON MONITORING OF LIQUID WASTE GENERATED BY AGRICULTURAL
ACTIVITIES/BUSINESSES AND OR INDUSTRY****THE MINISTER OF AGRICULTURE,**

- Considering :**
- a. that on the basis of Article 6 letter h of Decree of the State Minister of Environmental Affairs No. Kep-51/MENLH/10/1995, it is stipulated that every party assuming responsibility for industrial activities shall be obligated to submit a report on the real quality of the liquid waste to technically relevant government agencies in charge of the industry concerned and relevant government agencies deemed necessary pursuant to the prevailing acts;
 - b. that in addition to the industry as meant in letter a, agricultural activities/businesses which already possess an environmental management plan (RKL), an environmental monitoring plan (RPL), the document on environmental management undertaking (UKL) and the document on environmental monitoring undertaking (UPL) as required shall also be subject to liquid waste monitoring;
 - c. that to facilitate monitoring of the disposal of liquid waste and as an enforcement regulation of the provisions in letters a and b, it is deemed necessary to stipulate a report on monitoring of liquid waste in a Ministerial Decree.
- Bearing in mind :**
- 1. Act No. 6 of 1967;
 - 2. Act No. 9 of 1985;
 - 3. Act No. 12 of 1992;
 - 4. Act No. 23 of 1997;
 - 5. Act No. 17 of 1986;
 - 6. Government Regulation No. 20 of 1990;
 - 7. Government Regulation No. 51 of 1993;
 - 8. Presidential Decree No. 61 of 1998;
 - 9. Decree of the Minister of Agriculture No. 338/Kpts/HK.050/6/1987;
 - 10. Decree of the Minister of Agriculture No. 96/Kpts/OT.210/2/1994;
 - 11. Decree of the Minister of Agriculture No. 752/Kpts/OT.210/10/1994
- jo Decree of the Minister of Agriculture No. 562/Kpts/OT.210/6/97;

12. Decree of the Minister of Agriculture No. 25/Kpts/OT.210/1/95 jo Decree of the Minister of Agriculture No. 57/Kpts/OT.210/2/97;
13. Decree of the State Minister of Environmental Affairs No. Kep-51/MENLH/10/1995.

HAS DECIDED :

To Stipulate : THE DECREE OF THE MINISTER OF AGRICULTURE CONCERNING REPORTS ON MONITORING OF LIQUID WASTE GENERATED BY AGRICULTURAL ACTIVITIES/ BUSINESSES AND OR INDUSTRY.

Article 1

Referred to in this decree as :

- a. liquid waste shall be waste in liquid form generated by an activity/business and or industry, dumped into the environment and assumed to be able to lower the quality of the environment;
- b. the quality of liquid waste shall be the condition of liquid waste as expressed in debit, content and contamination load;
- c. agricultural activities/businesses and or industries shall be economic activities in the sectors of agricultural cultivation and or processing or industries of agricultural products acquiring a business license from the Minister of Agriculture or an official appointed by him or the Governor/Head of a First-Level Region.
- d. industries shall be economic activities of processing unprocessed and raw materials into goods with a higher value in terms of their use;
- e. initiators, hereinafter referred to as the party responsible for activities/businesses and or industries shall be a person or a group of persons or statutory bodies encompassing government agencies, state-owned enterprises and privately owned enterprises assuming responsibility for the implementation of activities/businesses and or industries.

Article 2

Reports on the monitoring of liquid waste shall, by way of obligation, be drawn up by the party responsible for activities/businesses and or industries in accordance with Form L-1 with the completion guideline being as referred to in the attachment to this decree.

Article 3

A liquid waste analysis shall be conducted by an official laboratory appointed by the governor/head of a local first-level region or already accredited and the result of the analysis must be attached to and shall constitute an inseparable part of the reports on the said liquid waste monitoring.

Article 4

The types of activities/businesses for which the drawing up of reports on liquid waste monitoring is obligatory shall encompass activities/businesses, which, in accordance with the acts on agricultural businesses and or industries pursuant to Government Regulation No. 17 of 1986, shall comprise :

- a. activities/businesses and or industries whose RKL and RPL documents have been approved by the Minister of Agriculture or the governor/head of a first-level region;
- b. activities/businesses and or industries whose UKL and UPL documents have been given *official directive from the officials in the agricultural sector pursuant to the prevailing acts.*

Article 5

Reports on liquid waste monitoring as meant in Article 2 shall be drawn up once a month and shall be conveyed in writing by the party responsible for the activities to :

- a. Minister of Agriculture, in this case, the head of the Agribusiness Agency, Ministry of Agriculture;
- b. chairman of the Agency for Control over Environmental Impact (BAPEDAL);
- c. governor/head of a first-level region, this case the Regional Agency for Control over Environmental Impact;

with copies to be addressed to :

- d. the *Director General within the Ministry of Agriculture in charge of and fostering activities/businesses and or industries;*
- e. head of a local regional office of the Ministry of Agriculture;
- f. head of a *first-level regional service in the agriculture sector in accordance with the types of activities/businesses and or industries;*
- g. head of a *second-level regional services in the agriculture sector in accordance with the types of activities/businesses and or industries.*

Article 6

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

Stipulated at : JAKARTA
On : OCTOBER 8, 1998

MINISTER OF AGRICULTURE

signed

Prof. Dr. Ir. H. Soleh Solahuddin, MSc

Attachment :

FORM : L-1
FOR A REPORT ON LIQUID WASTE MONITORING GENERATED BY AGRICULTURAL
ACTIVITIES/BUSINESSES AND OR INDUSTRIES.

I. GENERAL DATA

A. Company

1. Name of the company :
2. Address :
3. Telephone/Fax :
4. Name of the party responsible for activity :
5. Type of environmental study already conducted : PEL/PIL/SEL/ANDAL/
UKL/UPL (delete as
necessary)
6. Date of approval of RKL-RPL and or date on which a directive for
UKL-UPL is given :
7. Date of monitoring execution :
8. Name of testing laboratory :

B. Activities

1. Name of activities :
2. Location of activities :
- 2.1. Village :
- 2.2. Sub-district :
- 2.3. District :
- 2.4. Province :
3. Land area (Ha) :
- 3.1. :
- 3.2. :
4. Production (ton/month) :
- 4.1. :
- 4.2. :
5. Capacity of Processing Unit (ton/month) :
- 5.1. :
- 5.2. :
6. Length of Processing Unit Operation (hour/day) :
7. Processing Unit Production (ton/month) :
- 7.1. :
- 7.2. :

8. Source and Use of Standard Water

No.	Water Source	Use of Standard Water	Volume/ Debit (m ³ /day)
1.	river water.....1)	1.1. Processing Unit	
		1.2.	
2.	underground water	2.1.	
		2.2.	
3.	etc.	3.1.	
		3.2.	

Remark : 1) Mention the designation of the river pursuant to local regional regulation (if any).

9. Volume of recycled liquid waste (m³/day) :

10. Volume of liquid waste entering a liquid waste processing unit (pond (m³/day) :

11. River receiving processed liquid waste :

II. RESULT OF QUALITY MONITORING AND CALCULATION OF LIQUID WASTE Pollution LOAD

No.	Analyzed Parameter	Fresh 1) Waste (mg/l)	Processed waste (mg/l) 2)	Maximum Pollution Load (kg/ton of product)	Actual Pollution Load (kg/ton of product)
1	2	3	4	5	6
1.	BOD5				
2.	COD				
3.	TSS				
4.	CN				
5.	Sulfide (S)				
6.	Total Ammonia (N)				
7.	Oil and fat				
8.	Ph				
9.	etc.				

Maximum liquid waste debit (m³/ton of product) =

Actual liquid waste debit (m³/month) =

=====

Remark : 1) Quality of liquid waste prior to the execution of waste processing
 2) Quality of liquid waste after execution of waste processing (outlet from the last processing unit/pond)

Note : Specially with respect to chicken breeding activities/ businesses, columns 5 and 6 in the above table need not be calculated.

III. PROBLEMS ENCOUNTERED

No.	Details of problems	Follow-up needed	Agency expected to be able to help solve problems	Schedule of followup
1	2	3	4	5
1. 2. 3. etc.				

IV. IN-HOUSE KEEPING ACTIVITIES CONDUCTED

- 1.
- 2.

V. IMPLEMENTATION OF FORM COMPLETION

1. Date =
2. Completed by =
 - 2.1. Name :
 - 2.2. Position :
 - 2.3. Signature :
and company's seal

GUIDELINE FOR COMPLETION OF FORM : L-1 REPORT ON MONITORING OF LIQUID WASTE GENERATED BY AGRICULTURAL ACTIVITIES/BUSINESSES AND/OR INDUSTRIES

This form : L-1 (Report on Monitoring of Liquid Waste) comprises 4 (four) chief sections, namely :

- I. GENERAL DATA
- II. RESULT OF MONITORING OF THE QUALITY AND CALCULATION OF LIQUID WASTE POLLUTION LOAD
- III. PROBLEMS ENCOUNTERED
- IV. IN-HOUSE KEEPING ACTIVITIES CONDUCTED
- V. IMPLEMENTATION OF FORM COMPLETION

Full explanation of the completion of each section of form : L-1 shall be described as follows :

I. GENERAL DATA

This section is meant to provide an adequate picture/ information about the activities concerned.

A. Company

1. Complete fully in accordance with what is set forth in the notary's act on the establishment of the company.
2. Complete fully in accordance with what is set forth in the notary's act on the establishment of the company.
3. Self-Explanatory.
4. Complete fully and give the position of the person concerned in the company.
5. Self-Explanatory.
6. Complete in accordance with the date, month and year of the letter of approval of the RKL-RPL documents from the Minister of Agriculture (with respect to the PIL/PEL/SEL/ANDAL documents) while with respect to the UKL-UPL documents, supply the date, month and year in accordance with the meeting in which the directives is given.
7. Date, month and year of sample collection on site.
8. Name of the laboratory conducting the sample analysis.

B. Activities

1. Mention the activities conducted in conformity with the title set forth in the letter of approval of RKL-RPL or the UKL-UPL documents.
2. Self-Explanatory.
3. Mention the area of the plants for each commodity (Ha) up to the execution of monitoring. As for activities outside plant growing (for example: fishery, animal husbandry) mention the area of the land used for the activities/ businesses. In addition with respect to the use of business land, also mention the area of land for other uses : factory/processing unit, emplacement, offices, road facilities and others.
4. Mention the production of every commodity up to the execution of monitoring (Unit may change depending on the commodity).
For example : tons of cassava/month, thousand of chickens/year.
5. Mention the installed capacity of the processing unit (ton/month) of every commodity. (Unit may change, depending on the commodity processed).

6. Mention the length of operation of the processing unit (hour) per day (average).
7. Mention the quantity of the product turned out in one month. The said product is for example tons of tapioka/ month; tons of chicken meat/year.
8. Source and use of standard water.
 - Number 1 : Mention the name of the river and its designation by the regional administration (if any). For example :
B category.
 - 1.1. : Mention the name of the processing unit, for example a tapioka mill, an animal slaughter house; then mention the volume (m^3/day) of the standard water used.
 - 1.2. : Mention other uses, for example for emplacement and other uses as far as the standard water used has its origin in the said river water. Then mention the volume (m^3/day) for every said use.
Number 2 : Underground water (if standard water from underground water is used).
 - 2.1. : Mention the use of underground water (if any) for example for the processing unit/mill.
Then mention the volume (m^3/day) of underground water used.
 - 2.2. : Mention other uses, for example for emplacement (if any) as far as the said standard water has its origin in the underground water. Then mention the volume (m^3/day) for every said use.
Number 3 : Other sources of standard water (if any).
9. Mention the volume (m^3/day) of recycled liquid waste (if there is any recycled liquid waste) mention from processing the said liquid waste is recycled. For example (not binding), the recycled liquid waste has its origin in an aerobic pond) Other explanations which must be added about the recycled liquid are:
 - 9.1. use of recycled liquid waste
 - 9.2. volume of recycled liquid waste
 - 9.3. quality of liquid waste parameter (BOD5, COD, TSS, CN, sulfide, oil and fat) in mg/l .
10. Mention the volume (m^3/day) of liquid waste (fresh) entering the processing unit (pond) of liquid waste.
11. Mention the name of the river receiving processed liquid waste along with its designation pursuant to the regulation of a local administration (if any), and do likewise with the debit of the said river.

II. RESULT OF QUALITY MONITORING AND CALCULATION OF LIQUID WASTE POLLUTION LOAD

Column 1	:	serial number
Column 2	:	mention the name of the parameter analyzed in the laboratory with a provision that parameters No. 1 (BOD5) up to No. 8 (pH) must absolutely be analyzed. No. 9 and on may be analyzed as necessary.
Column 3	:	Mention the result of the laboratory analysis in accordance with the parameter of the fresh liquid waste analyzed.
Column 4	:	Mention the result of the laboratory analysis in accordance with the parameter of the processed waste analyzed.
Column 5	:	Mention the maximum contamination load contained in the prevailing liquid waste quality standard (Decree of State Minister of Environment No. KEP-51/MENLH/10/95) or pursuant to the local regional regulations.
Column 6	:	The result of the calculation of actual contamination load (kg/ton of product) of each parameter using the following formula : $BPA = (CA) J \times DA / Pb \times f$ $BPA = \text{actual contamination load in kg parameter/ton of product (tapioca).}$ $(CA) J = \text{value found in column 4 (result of laboratory analysis, mg/l)}$ $DA = \text{actual debit of liquid waste in m}^3/\text{month DP} \times H.$ $DP : \text{result of measurement of liquid waste debit at the outlet from the last pond unit in m}^3/\text{day.}$ $H : \text{average number of working days in the month concerned.}$ $Pb : \text{actual product in a month, for example 100 tons of tapioca/month}$ $f : \text{factor of conversion} = 1/1,000$

Example of calculation :

Data obtained :

- Column 4 : value of COD (CA) cod = 300 mg/l (result of laboratory analysis).

DP = result of masurement of water debit at the outlet of liquid waste = 50 m³/day.

H = number of working days, for example : 25 days/month

Pb = the product (tapioca) turned out every month = 100 tons.

- Column 6 : calculated as follows :

$BPA = (CA) \text{ cod} \times DA / Pb \times f$

$$\text{COD} = \frac{(50 \times 25)}{100} \times 300 \times \frac{1}{1,000} = 3,75 \text{ kg/ton of product.}$$

III. PROBLEMS ENCOUNTERED

- Column 1 : Mention the serial number.
- Column 2 : Mention the problems encountered in the implementation of the environment. For example (not binding), dust collectors to overcome the problems of dust arising from the process of drying must be imported so that the cost will be quite big.
- Column 3 : Mention the effort/follow-up to overcome the problems referred to in Column 2.
- Column 4 : Mention the government agency which can help solving these problems.
- Column 5 : Mention the time/schedule in taking follow-up measures regarding the solution to the said problems.

IV. IN-HOUSE KEEPING ACTIVITIES CONDUCTED

This chapter contains a description of in-house keeping activities conducted in the processing chamber. For example (not binding), the activity conducted is the provision of a place where oil drips and others shall be collected.

V. IMPLEMENTATION OF FORM COMPLETION

This chapter contains the date when the form is completed. Mention the name and position of the person responsible for the validity of the content of the form. To make this report valid, this part must be signed and stamped with the company's seal.

THE MINISTER OF AGRICULTURE

signed

Prof. Dr. Ir. H. SOLEH SOLAHUDDIN, MSc

ooo000ooo