

## GUIDELINE FOR EVALUATION OF SUCCESSFUL FOREST RECLAMATION

(Regulation of the Minister of Forestry of RI Number P.60/Menhut-II/2009,  
dated September 17, 2009)

WITH THE BLESSING OF THE ONE AND ONLY GOD

MINISTER OF FORESTRY OF  
THE REPUBLIC OF INDONESIA,

Considering:

That to implement the provision in Article 50 paragraph (5) of Government Regulation Number 76 Year 2008 concerning Forest Rehabilitation and Reclamation, it is necessary to stipulate Regulation of the Minister of Forestry of the Republic of Indonesia concerning Guideline for Evaluation of Successful Forest Rehabilitation and Reclamation;

In view of:

1. Law Number 41 Year 1999 (*BN No. 6412 pages 1A-6A and so forth*) concerning Forestry (Statute Book of the Republic of Indonesia Year 1999 Number 167, Supplement to Statute Book of the Republic of Indonesia Number 3888) as amended by Law Number 19 Year 2004 (*BN No. 7143 pages 26A-29A*) concerning Stipulation of Government Regulation in Lieu of Law Number 1 Year 2004 (*BN No. 7034 pgs.. 9B*) concerning Amendment to Law Number 41 Year 1999 concerning Forestry to become Law (Statute Book of the Republic of Indonesia Year 2004 Number 86, Supplement to Statute Book of the Republic of Indonesia Number 4412);
2. Law Number 32 Year 2004 (*BN No. 7183 pages 1A-11A and so forth*) concerning Regional Government (Statute Book of the Republic of Indonesia Year 2004 Number 125, Supplement to Statute Book of the Republic of Indonesia Number 4437) as amended several times and lately amended by Law Number 12 Year 2008 (*BN No. 7676 pages 26A-32A and so forth*) (Statute Book of the Republic of Indonesia Year 2008 Number 59, Supplement to Statute Book of the Republic of Indonesia Number 4844);
3. Government Regulation Number 35 Year 2002 (*BN No. 6838 pages 2A-10A*) concerning Forestry Fund (Statute Book of the Republic of Indonesia Year 2002 Number 67, Supplement to Statute Book of the Republic of Indonesia Number 4207) as amended by Government Regulation Number 58 Year 2007 (Statute Book of the Republic of Indonesia Year 2007 Number 131, Supplement to Statute Book of the Republic of Indonesia Number 4776);
4. Government Regulation Number 44 Year 2004 concerning Forest Program (Statute Book of the Republic of Indonesia Year 2004 Number 146, Supplement to Statute Book of the Republic of Indonesia Number 4453);
5. Government Regulation Number 45 Year 2004 concerning Forest Protection (Statute Book of

- the Republic of Indonesia Year 2004 Number 147, Supplement to Statute Book of the Republic of Indonesia Number 4453);
6. Government Regulation No. 6 Year 2007 (*BN No. 7529 pages 1A-21A and so forth*) concerning Forest Layout and Structuring Forest Management Program, and Forest Utilization (Statute Book of the Republic of Indonesia Year 2007 Number 22, Supplement to Statute Book of the Republic of Indonesia Number 4696) as amended by Government Regulation of the Republic of Indonesia Number 3 Year 2008 (*BN No. 7676 pages 10A-25A and so forth*) (Statute Book of the Republic of Indonesia Year 2008 Number 16, Supplement to Statute Book of the Republic of Indonesia Number 4814);
  7. Government Regulation of the Republic of Indonesia Number 38 Year 2007 concerning Distribution of Administration Affairs between the Government, Regional Government of Province, and Regional Administration of Regency/Municipality (Statute Book of the Republic of Indonesia Year 2007 Number 82, Supplement to Statute Book of the Republic of Indonesia Number 4737);
  8. Government Regulation Number 76 Year 2008 (*BN No. 7847 pages 28A-36A*) concerning Forest Rehabilitation and Reclamation (Statute Book of the Republic of Indonesia Year 2008 Number 201, Supplement to Statute Book of the Republic of Indonesia Number 4947);
  9. Presidential Decree Number 187/M Year 2004 (*BN No. 7128 pages 30A-31A*) concerning Establishment of Indonesia Bersatu Cabinet, as amended several times and lately amended by Presidential Decree Number 31/P Year 2007;
  10. Presidential Regulation Number 9 Year 2005 (*BN No. 7184 pages 2A-23A*) concerning Capacity, Duty, Function, Organizational Structure and Working Procedure of the State Ministry of the Republic of Indonesia, as amended several times and lately amended by Presidential Regulation Number 20 Year 2008;
  11. Presidential Regulation Number 10 Year 2005 concerning Organizational Unit and Duty of Echelon I of the State Ministry of the Republic of Indonesia, as amended several times and lately amended by Presidential Regulation Number 50 Year 2008;
  12. Regulation of the Minister of Forestry Number P.13/Menhut-II/2005 concerning Organizational Structure and Working Procedure of the Department of Forestry, as amended several times and lately amended by Regulation of the Minister of Forestry of the Republic of Indonesia Number P.64/Menhut-II/2008 (State Gazette of the Republic of Indonesia Year 2008 Number 80);

**DECIDES:**

To stipulate:

**REGULATION OF THE MINISTER OF FORESTRY ON GUIDELINE FOR EVALUATION OF SUCCESSFUL FOREST RECLAMATION.**

**CHAPTER I  
INTERPRETATION**

**Article 1**

What is meant in this Regulation by:

1. **Water Drop Structure (Drop Structure)** shall be drop structure made at certain distance on the Water Discharging Channel/SPA (depending on the land slope) made of stone, wood/bamboo.
2. **Cover crop** shall be any plant that grows closely planted particularly for the purpose of protecting and repairing the soil between the production period of the main crop or trees and creeping plant.
3. **Resisting Dam** shall be small dam for water passage with stone barbed wire, plated twigs or bamboo/wood trucuk made on ravine channel with a height of maximum four (4) meters.
4. **Controlling Dam** shall be small dam that may accommodate water (not passing water) made of soil fill-in construction with water proof layer or concrete construction( bow type) to control erosion and surface flow and made of small channel/stream with maximum height eight (8) meters.
5. **Erosion** shall be peeling and removing process of soil or stone particles caused by kinetic energy (water, snow and wind).
6. **Channel Erosion** shall be peeling followed by transportation of soil particles by concentrated escaped water flow in the water channel.
7. **Ditch Erosion** shall be establishing deeper and wider range of ditches and constituting advanced level of channel erosion.
8. **Sampling intensity** shall be measurement proportion of sample against the number of population.
9. **Environmental Pollution** shall be incoming or input of living creature, substance, energy or other component into the environment and/or the change made to the environment by natural process, so that the environmental quality is reducing up to a certain level causing the environment to become less or not functioning according to its allocation.
10. **Evaluation** shall be observance conducted periodically on forest reclamation activity to secure that the activity program proposed, activity schedule, the desired result and other necessary activities may run smoothly according to plan and constituting as the basis for extension, release of the license for forest use and to perceive progress in the implementation of forest reclamation;
11. **Percentage of cultivated plants** shall be the proportion between healthy plants and the total target of plants multiplied by 100% (one hundred percent).
12. **Mining** shall be part of or the entire phases of activities in the context of research, management and exploitation of mineral or coal covering the general research, exploration, feasibility study, construction, mining, management and

refinery, transportation and sale, and post-mining activity.

13. Environmental destruction shall be activity that causes direct or indirect change to the physical characteristics and/or biological environment, causing the environment to be less or no longer functioning to support incessant development.
14. Change to soil surface shall be the change to the landscape caused by forest zone use, while change to soil cover shall be change to types of vegetation originally existing in forest zone.
15. Forest and land rehabilitation shall be effort to recover, maintain and improve the function of forest and land so as to improve supporting power, productivity and its role in maintaining the supporting system of lifespan in good order.
16. Forest reclamation shall be effort to repair or recover damaged land and vegetation to optimally function again according to its allocation.
17. Revegetation shall be effort to repair and recover damaged vegetation by means of planting and maintaining the forest zone land that is previously used.
18. Diverted Channel shall be diverted channel made to prevent water flow on the soil surface in watch catch area that directly flows to the ravine to prevent the land from drowning on the land that easily slide.
19. Water Discharge Channel (SPA) shall be water channel made straight upright headubg the con-

tour with certain measurement (based on rainfall condition, land slope, speed of the water penetrating to the soil/type of soil) supported by grass cluster (gebalan).

20. Sedimentation shall be sedimentation of material transported by water, wind, or gravitation force in lower places.
21. River Flow Observation Terminal (SPAS) shall be any construction and its equipment, constructed river / stream section for the purpose of continuous monitoring the water system.
22. Systematic Sampling with Random Start shall be any method for sampling conducted systematically by conducting the first sampling at random.
23. Mining shall be effort of mining and excavation of mineral conducted on the earth surface.
24. Surface mining shall be effort for mining and excavating mineral which activity is directly connected to open air.
25. Top Soil shall be the top soil layer containing much nutritive substance which is very good for plants growth.
26. Long-Term Cycle Local Plants shall be types of original or exotic plants liked by the community that have particular superiority such as timber product, fruits and latex and its product has high economic value, such as Jati, Rasamala, Mahoni, Cempaka, Meranti, Lime, very hard wood (Ulin) and/or Multi Purpose Trees Species (MPTS) such as Durian, Manggo, Rambutan, Pete, Jengkol, Breadfruit (Sukun), Jackfruit (Nangka).

## CHAPTER II

## PURPOSES, OBJECTIVES AND TARGET

## Article 2

- (1) The purpose of this guideline for evaluation of successful forest reclamation is to provide reference to the operator in evaluating successful forest reclamation on the formerly used forest zone.
- (2) The objective of this guideline for evaluation of successful forest reclamation is for the purpose that implementation of forest reclamation must be based on the stipulated provision and according to its allocation.

## Article 3

The target of Guideline for Evaluation of Successful Forest Reclamation shall be to evaluate successful implementation of forest reclamation on the formerly used forest zone, in the context of:

- a. extension of license for loan and use of forest zone;
- b. release of license for loan and use of forest zone; and
- c. evaluate the progress in the implementation of forest reclamation on the area of formerly used forest zone.

## CHAPTER III

## CRITERIA OF SUCCESSFUL FOREST RECLAMATION

## Article 4

- (1) Implementation of evaluation on successful forest reclamation shall refer to the criteria on successful forest zone reclamation.

(2) Criteria on successful forest reclamation is stipulated as follows:

- a. layout of the land;
- b. control of erosion and sedimentation;
- c. revegetation or trees planting.

## Article 5

Orderly arrangement of the land referred to in Article 4 paragraph (2) letter a, shall cover:

- a. refilling the hole previously used for mining;
- b. orderly arrangement of the land surface;
- c. slope stability; and
- d. spreading out top soil.

## Article 6

The erosion and sedimentation control referred to in Article 4 paragraph (2) letter b, shall cover:

- a. construction of land preservation (checkdam, resisting dam, ravine control, drop structure, drainage channel, etc).
- b. Planting cover crops to minimize speed of overflow water and improve infiltration.
- c. event of erosion and sedimentation (observed from the event of channel erosion and ditch erosion).

## Article 7

The revegetation or tree planting referred to in Article 4 paragraph (2) letter c, consists of:

- a. planting area extent;
- b. percentage of vegetation growth;

- c. total number of plants per hectare;
- d. composition of types of plants; and
- e. plants growth or health.

**CHAPTER IV  
METHOD OF EVALUATION**

**Article 8**

- (1) Method of evaluation on successful forest reclamation in general shall be measured by collecting data and information from all aspects in the implementation of forest reclamation.
- (2) To obtain accurate result of the evaluation, it is necessary to have data and information directly from the field.
- (3) Out of the data and information, analysis shall be further conducted so as to obtain result of evaluation according to the real condition in the field. The result of evaluation shall constitute constructive input material for decision making.

**Article 9**

The method of evaluation used in this guideline is as follows:

- a. survey
- b. study of reference
- c. sampling
- d. scoring and weight
- e. analysis

**Article 10**

- (1) The survey referred to in Article 9 letter a, constitutes first-hand data and information

collecting activity conducted by means of fact finding directly in the field.

- (2) The first-hand data obtained may be in the form of numeric, spatial data and description of a particular condition.

**Article 11**

- (1) The reference study referred to in Article 9 letter b, constitutes collecting activity of existing data and information (secondary data) without conducting survey or fact finding in the field.
- (2) The data referred to in paragraph (1) constituting as the basis for evaluation and normally already stated in existing documents, either the document on planning, reporting, and other important documents, such as Amdal, RPK/RKL, etc.

**Article 12**

- (1) In the sampling referred to in Article 9 letter c, conducted to find out some parameters in the evaluation of successful forest reclamation, it is necessary to conduct technical sampling, such as, for percentage of plants growth and health level of the trees.
- (2) The sampling referred to in paragraph (1) in order to comply with representative principles, it is necessary to stipulate Sampling Intensity, namely of minimum 5% (five percent).

**Article 13**

- (1) The scoring and weight referred to in Article 9 letter d, shall be conducted in order to provide quantitative evaluation;
- (2) The system of scoring and weight provision referred to in paragraph (1) shall be conducted on each criteria and parameter of successful forest reclamation.
- (3) The weight provision on each criterium with a total 100 weight. The level of weight value on each criterium shall be determined according to level of interest thereof.
- (4) the weight provision for each criteria shall be as follows:
- a. arrangement of land with a weight of 30;
  - b. control of erosion and sedimentation with a weight of 20; and
  - c. revegetation with a weight of 50.
- (5) The scoring system is applied on each parameter by providing maximum 5 score/value and the lowest value is given 1.

**Article 14**

- (1) With respect to the analysis referred to in Article 9 letter e, evaluation on successful forest reclamation shall be conducted in the field based on Table of Criteria and Level Indicator on Successful Forest Reclamation.
- (2) The Table and Level Indicator on Successful Forest Reclamation shall as set off in Attachment 1.

**Article 15**

Based on the Criteria and Level Indicator on Successful Forest Reclamation referred to in Article 14, calculation of the total value shall be made using the formula below:

$$TN = \sum_{i=1}^n [TS_i / SM_i \times B_i]$$

Where:

- TN = Total Value  
 TS<sub>i</sub> = Total score on criteria I of evaluation  
 SM<sub>i</sub> = maximum value of criteria i  
 n = total criteria  
 B<sub>i</sub> = Weight for criteria i

The total maximum value is 100.

**Article 16**

Based on calculation of the total value referred to in Article 23 the following criteria and conclusion will be obtained:

1. Total value > 80 : Good (result of implementation of reclamation is acceptable).
2. Total value 60 - 80 : Fair ( result of implementation of reclamation is acceptable with the note that repair must be made in order to reach the value of > 80.)
3. Total value < 60 : Poor (result of reclamation is unacceptable and needs intensive maintenance). To release the loan and use forest zone, if the license is expired, then repair of reclamation may use the three (3) year maintenance period, so as to reach the sufficient value of > 80.

**Article 17**

Method of evaluation for each criteria and parameter of successful forest reclamation shall be as set forth in Attachment 2.

**CHAPTER V****PROCEDURE OF EVALUATION****Article 18**

- (1) Evaluation on the implementation of forest reclamation shall be conducted by the Minister of Forestry by involving the relevant Minister, Governor and Regent/Mayor according to their respective authority.
- (2) This evaluation on the implementation of forest shall constitute the basis for determining successful forest reclamation.

**Article 19**

The evaluation on successful forest reclamation in provincial level shall be coordinated by provincial service office handling forestry, provided that:

1. the Head of Service Office of Province handling Forestry matter establishes a Team with members comprising:
  - Chairman : Service Office element of Province handling forestry;
  - Secretary : DAS Management Community Hall element
  - Members : a. UPT element of the Department of Forestry related to (BPDAS/BPKH/BP2HP/BKSDA)

- d. element of Service Office of Province handling forestry;
- e. element of Service Office of Province handling mining;
- f. element of Service Office of Regency/Municipality handling forestry;
- g. element of Service Office of Regency/Municipality handling forestry;
- h. other related agencies.

2. The Provincial Team shall prepare Work Program on Evaluation of Successful Forest Reclamation in accordance with the guideline containing among other things, method and technology of evaluation (evaluation, fact-finding, and mapping), division of evaluation task force, evaluation time schedule, approved by the Head of Service Office of Province handling Forestry as the basis for implementing evaluation.
3. After evaluation on successful forestry reclamation is complete, Minutes shall be drawn up on the result of evaluation and affixed with the map signed by the Team, using the format of Minutes on the result of evaluation as referred to in Attachment 3.
4. The Head of Service Office of Province handling forestry shall report the result of evaluation on successful forest reclamation to the Minister of Forestry with copy to the Director General of RLPS, Director General of Forestry Planology, and the Director General of of the Department of ESDM and other related parties.

### Article 20

Evaluation of successful forest reclamation by the Central Team is conducted by means of pick and test of the result of evaluation conducted by the Provincial Team. The evaluation conducted by the Central Team is coordinated by the Director General of RLPS, provided that:

1. The Director General of RLPS on behalf of the Minister of Forestry shall establish Team of Evaluation on Successful Forest Reclamation in Provincial level which further referred to as Central Team with membership composition as follows:

The person in-Charge: Director General of RLPS

**Chairman** : Director of Rehabilitation Management of Forest and Land

**Secretary** : Head of Land Preservation and Forest Reclamation, Directorate General of RLPS

**Members** : a. element of the Directorate General of Minerbapabum, Dep. ESDM

b. element of the Directorate General of Forestry Planology, of the Department of Forestry

c. element of the Directorate General of PHKA of the Department of Forestry

d. element of the Directorate General of RLPS, of the Department of Forestry

e. element of the Deputy of Natural Resources Preservation Improvement and Environmental Damage Control, Ministry of Living Environment.

f. element of Service Office of Province handling forestry

g. element of UPT of the Department of Forestry (BPDAS/ BPKH/BP2HP/ BKSDA)

2. The Central Team shall prepare Work Program based on the guideline containing among other things, method, technology for evaluation and time schedule for evaluation as approved by the Director General of RLPS constituting the basis for conducting evaluation.

3. After evaluation is complete Minutes shall be drawn up and affixed with the map signed by the Team. Example of Minutes can be seen on Table 14.
4. The Director General of RLPS as the Person in Charge of the Central Team shall review the result of evaluation on successful forest reclamation by inviting the Central Team and Provincial Team.
5. The Director General of RLPS shall report the result of evaluation on successful forest reclamation to the Minister of Forestry with copy to the Director General of Forestry Planology, the Director General of Minerbapabum of the Department of ESDM and other related parties.

## CHAPTER VI

### RESULT OF EVALUATION

#### Article 21

- (1) The whole result of evaluation on successful forest reclamation shall be compiled by the Central Team based on the result of evaluation conducted by the Provincial Team and the result of re-checking in the field by the Central Team.
- (2) The result of evaluation by the Central Team referred to in paragraph (1) shall constitute material for consideration for extension of license for loan and use of forest zone and for release thereof, provided that:
  - a. if the total value of the whole result of forest reclamation reaches  $> 80$ , implementation of

- forest reclamation shall be declared successful and is acceptable;
- b. if the total value of the result of forest reclamation reaches 60 - 79, then implementation of forest reclamation shall be declared unsuccessful so that it is unacceptable and needs further repair in order to reach a total value of minimum 80;
- c. if the total value of the whole result of reclamation is  $< 60$ , then implementation of forest reclamation is unacceptable and needs intensive repair so as to reach the total value of minimum 80;
- d. if the license for loan and use of land expired and the value of forest reclamation fails to reach 80, then the forest reclamation must be continued using the three (3) years period of repair without extending the license for loan and use of forest zone until the total value of minimum 80 is reached.

## CHAPTER VII

### REPORTING

#### Article 22

- (1) The result of Evaluation on Successful Forest Reclamation is presented and provided in Final Report.
- (2) The final report shall contain definition of the result of evaluation on successful forest reclamation conducted, using the format as specified in Attachment 4.

**CHAPTER VIII  
CLOSING PROVISION**

**Article 23**

This Regulation of the Minister of Forestry takes effect on the date it is enacted.

For public cognizance, this Regulation of the Minister of Forestry shall be announced by placing it in the State Gazette of the Republic of Indonesia.

Stipulated in Jakarta  
On September 17, 2009  
MINISTER OF FORESTRY  
OF THE REPUBLIC OF INDONESIA,  
sgd.  
H.M.S. KABAN

Enacted in Jakarta  
On September 29, 2009  
MINISTER OF LAW AND HUMAN RIGHTS  
OF THE REPUBLIC OF INDONESIA,  
sgd.  
ANDI MATTALATTA

STATE GAZETTE OF THE OF THE REPUBLIC OF INDONE-  
SIA YEAR 2009 NUMBER 317

Note from Editor:  
- Due to technical reason no Attachment is avail-  
able.

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