

GROUND WATER

(R.I. Government Regulation No. 43 Year 2008, dated May 23, 2008)

WITH THE BLESSING OF THE ONE AND ONLY GOD
THE PRESIDENT OF THE REPUBLIC OF INDONESIA

Considering:

That in order to execute provisions of Article 10, Article 12 paragraph (3), Article 13 paragraph (5), Article 37 paragraph (3), Article 57 paragraph (3), Article 58 paragraph (2), Article 60, Article 69, and Article 76 of Law No. 7 Year 2004 concerning Ground Water Resources, it is necessary to stipulate a Government Regulation on Ground Water;

In view of:

1. Article 5 paragraph (2) of the 1945 Constitution of the Republic Of Indonesia (*BN No. 7152 pages 14A-23A*);
2. Law No. 7 Year 2004 (*BN No. 7077 pages 16A-32A and so on*) concerning Water Resources (R.I. Statute Book Year 2004 No. 32, Supplement to R.I. Statute Book No. 4377);

DECIDES :

To stipulate:

GOVERNMENT REGULATION ON GROUND WATER

CHAPTER I

GENERAL PROVISIONS

Article 1

In this Government Regulation, what is meant by:

1. Ground water is water existing in ground or rock layers under ground surface.
2. Aquifer is a rock layer saturated with ground water in a sufficient and economic volume.
3. Ground water basin is an area bordered by hydrogeology borders, a place where all hydrogeology events occur, such as the process of addition, flow and release of ground water.
4. Ground water supplement area is a water absorption area able to add ground water naturally to ground water basins.
5. Ground water release area is an area where ground water is discharged naturally to ground water basins.
6. Technical recommendation is a technical requirement having a binding nature in the provision of permit for ground water use or permit for ground water exploitation.
7. Ground water management is an effort on the planning, executing, monitoring, evaluating of ground water conservation, ground water utilization, and control of ground water destructive power.
8. Ground water inventorying is an activity to obtain ground water data and information.
9. Ground water conservation is an effort to maintain the existence and continuity of the condition, nature and functions of ground water so as to be always available in an adequate quantity and quality to meet the requirements of living species, both at present and in the future.
10. Ground water utility is an effort to administer the order of usage, supply, use, development, and exploitation of ground water at an optimum effectively and efficiently.

11. Control of ground water destructive power is an effort to prevent, to tackle, and to restore the quality of the environment damaged by ground water destructive power.
12. *Ground water drilling is an activity to make ground water artesian wells carried out in accordance with technical guidance as means for explorations, taking, use and exploitation, monitoring, or adding ground water.*
13. Ground water digging is an activity to make dug wells, water channels, and water tunnels to get ground water, carried out in accordance with technical guidance as means for explorations, taking, use and exploitation, monitoring, or adding ground water.
14. Right of water usage from the utilization of ground water is a right to get and use or exploit ground water for various necessities.
15. Right to use water from the utilization of ground water is the right to get and use ground water.
16. Right to exploit water from the utilization of ground water is the right to get and exploit ground water.
17. Permit for the use of ground water is a permit to obtain a right to use water from the utilization of ground water.
18. Permit for the exploitation of ground water is a permit to obtain a right on the usage of water from the utilization of ground water.
19. *Business entity is an entity, either in the form of legal entity or non-legal entity.*
20. *Minister is the Minister whose duty and responsibility is in the field of ground water.*
21. *Central Government, hereinafter referred to as Government, is the President of the Republic of Indonesia holding government authority of the State of the*

Republic of Indonesia as meant in the 1945 Constitution of the Republic of Indonesia.

22. Regional Government is the Governors, regents or mayors, and regional apparatus as execution elements of the Regional Government.

Article 2

Water resources include ground water managed *comprehensively, integrated and having a living environment vision for the purpose of realizing a continuous water benefit for the prosperity of the people at a maximum.*

Article 3

- (1) Ground water referred to in Article 2 shall be managed with a principle of integrity with surface water.
- (2) Provisions on surface water referred to in paragraph (1) shall be regulated in a separate Government Regulation.

CHAPTER II

BASIS OF GROUND WATER MANAGEMENT

Part One

General

Article 4

The management of ground water referred to in Article 2 shall be based on ground water basins executed based on the policy and strategy of ground water management.

Part Two

Ground Water Management Policy

Article 5

- (1) Policy on ground water management referred to in Article 4 is aimed as a direction in the performance of

ground water conservation, utilization, control of ground water destructive power, and ground water information system compiled by taking into account the condition of local ground water.

- (2) Policy on ground water management referred to in paragraph (1) shall be compiled and stipulated integrated within the policy on water resources management.
- (3) Policy on water resources management. Referred to in paragraph (2) consist of:
 - a. national policy on water resources;
 - b. policy on water resources management at province level; and
 - c. policy on water resources management at regency/ municipality level.
- (4) Policy on water resources management referred to in paragraph (3) is regulated in a government regulation on the management of water resources.

Article 6

- (1) Policy on water resources management. referred to in Article 5 paragraph (2) shall further be clarified in a technical policy on the management of ground water.
- (2) The technical policy on the management of ground water referred to in paragraph (1) consists of:
 - a. national technical policy on the management of ground water;
 - b. provincial technical policy on the management of ground water.; and
 - c. regency/municipality technical policy on the management of ground water.
- (3) The Minister compiles and stipulates national technical policy on the management of ground water by

referring to national policy on water resources management referred to in Article 5 paragraph (3) letter a.

- (4) The governor compiles and stipulates provincial technical policy on the management of ground water by referring to national policy on water resources management referred to in paragraph (3) and guided by policy on water resources management at province level as meant in Article 5 paragraph (3) letter b.
- (5) The regent/mayor compiles and stipulates regency/ municipality technical policy on the management of ground water by referring to provincial policy on water resources management referred to in paragraph (4) and guided by policy on water resources management at regency / municipality level referred to in Article 5 paragraph (3) letter c.
- (6) Compilation of technical policy on the management of ground water by the Minister, governor, or regent/ mayor referred to in paragraph (3), paragraph (4), and paragraph (5) shall be executed pursuant to his/ her authority thru a consultation with the public by inviting the participation of technical agencies and related community elements.

Part Three

Ground Water Basin

Paragraph 1

General

Article 7

- (1) Ground water basin as meant in Article 4 is stipulated with a Presidential Decree.
- (2) The ground water basin referred to in paragraph (1) shall be stipulated as:

- a. Ground water basin in one regency/municipality;
 - b. Inter-regency/municipality ground water basin;
 - c. Inter-province ground water basin; and
 - d. Inter-state ground water basin.
- (3) Stipulation of the ground water basin referred to in paragraph (2) is made based on criteria and procedure on the stipulation of ground water basin.

Paragraph 2

Ground Water Basin Criteria

Article 8

Ground water basin is stipulated based on the following criteria:

- a. having a hydro-geological border controlled by geological condition and/or hydraulic condition of ground water;
- b. having a ground water supplement zone and release zone in one ground water formation system; and
- c. having one aquifer system unity.

Paragraph 3

Ground Water Basin Stipulation Procedure

Article 9

- (1) The Minister compiles a stipulation draft on Ground Water Basin.
- (2) Compilation of the stipulation draft on Ground Water Basin is performed thru:
 - a. Identification of ground water basin;
 - b. Determination of ground water basin borders; and
 - c. Public consultation
- (3) Further provisions on the compilation of stipulation draft on Ground Water Basin referred to in paragraph (2) shall be regulated with a Regulation of the Minister.

Article 10

- (1) Stipulation draft on Ground Water Basin may be proposed by the governor and/or regent/mayor.
- (2) Stipulation draft on Ground Water Basin referred to in paragraph (1) must be compiled thru the stages referred to in Article 9 paragraph (2).
- (3) Prior to its submission to the Minister, the stipulation draft on Ground Water Basin referred to in paragraph (2) must be consulted to the board or coordination forum of regional water resources management.
- (4) In the event the board or coordination forum of regional water resources management is not or not yet established, the stipulation draft on Ground Water Basin referred to in paragraph (3) shall be submitted directly to the Minister.
- (5) Based on the proposal referred to in paragraph (1), paragraph (2), and paragraph (3) or paragraph (4), the Minister makes an evaluation.
- (6) Based on results of the evaluation referred to in paragraph (5), the Minister may reject or approve the proposal on the stipulation draft on Ground Water Basin.

Article 11

- (1) Stipulation draft on Ground Water Basin, either compiled by the Minister as referred to in Article 9 paragraph (1) or proposed by the governor and/or regent/mayor having been approved by the Minister as meant in Article 10 paragraph (6), shall be submitted by the Minister to the National Water Resources Board for consideration.

- (2) Stipulation draft on Ground Water Basin that had received the consideration of the National Water Resources Board referred to in paragraph (1) will be submitted by the Minister to the President for stipulation.
- (3) Ground water basin that had been stipulated by the President shall then be a basis for the management of ground water by the Minister, governor, or regent/mayor in accordance with his/her authority.
- (4) Management of ground water outside of ground water basins that had been stipulated as meant in paragraph (3) shall be regulated with a Regulation of the Minister.

Article 12

Ground water basin that had been stipulated may be re-reviewed if there are any physical changes of the related ground water basin and/or new data are found based on the criteria referred to in Article 8.

Part Four

Ground Water Management Strategy

Article 13

- (1) Strategy of the management of ground water referred to in Article 4 constitutes a basic frame in the planning, performance, monitoring and evaluation of ground water conservation, utilization of ground water, control of ground water destructive power at a ground water basin.
- (2) The strategy of the management of ground water referred to in paragraph (1) shall be compiled and stipulated integrated with the water resources management pattern of river zones.
- (3) The water resources management pattern referred to in paragraph (2) consist of water resources management pattern of river zones:

- a. in one regency/municipality;
- b. inter-regency/municipality;
- c. inter-province;
- d. inter-state; and
- e. nationally strategic.

- (4) The water resources management pattern referred to in paragraph (3) is regulated in a Government Regulation on Water Resources Management.

Article 14

- (1) The water resources management pattern referred to in Article 13 paragraph (2) shall further be broken down into implementation strategies of ground water management.
- (2) Implementation strategy for the management of ground water referred to in paragraph (1) shall be compiled and stipulated for each ground water basin.
- (3) Implementation strategy of ground water management referred to in paragraph (2) consist of implementation strategy for the management of ground water in:
 - a. inter-province or inter-state ground water basins;
 - b. inter-regency/municipality ground water basins; and
 - c. ground water basins in one regency/municipality

Article 15

- (1) Implementation strategy of ground water management shall be compiled based on data and information on:
 - a. potentials of ground water and hydro-geologic characteristics of related ground water basin;
 - b. water requirement projection for various necessities on the related ground water basin; and
 - c. changes of ground water condition and environment.

- (2) Implementation strategy of ground water management contains:
- a. Purpose and targets of ground water management on the related ground water basin;
 - b. Scenario chosen to achieve the purpose and targets of ground water management;
 - c. *Basis of considerations used to choose and stipulate the scenario referred to in letter b;*
 - d. Operational activities or steps to perform the ground water management scenario.

Article 16

- (1) The Minister compiles and stipulates an implementation strategy of ground water management for inter-province or inter-state ground water basins referred to in Article 14 paragraph (3) letter a based on technical policy on national ground water management, and referring to water resources management pattern of related river zones.
- (2) The governor compiles and stipulates an implementation strategy of ground water management for inter-regency/municipality ground water basin referred to in Article 14 paragraph (3) letter b based on technical policy on provincial ground water management, and referring to water resources management pattern of related river zones.
- (3) The regent/mayor compiles and stipulates an implementation strategy of ground water management within the regency/municipality ground water basin referred to in Article 14 paragraph (3) letter c based on the technical policy on regency/municipality ground water management, and referring to water resources management pattern of related river zones.

- (4) Compilation of the implementation strategies of ground water management by the Minister, governor, or regent/mayor referred to in in paragraph (1), paragraph (2), and paragraph (3) shall be performed in accordance with his/her authority thru public consultation by including technical agencies and related community elements.

Article 17

Implementation strategies of ground water management referred to in Article 16:

- a. shall be compiled based on guidance stipulated by the Minister;
- b. conditioned for 25 (twenty five) years in the future and may be reviewed if new data and information are found.

CHAPTER III

GROUND WATER MANAGEMENT

Part One

General

Article 18

- (1) Ground water management shall be performed based on an implementation strategy of ground water management with the principle of balance between efforts on the conservation and the utilization of ground water.
- (2) Ground water management consists of activities on planning, execution, monitoring, evaluating of ground water conservation, ground water utilization, and control of ground water destructive power.
- (3) In order to support ground water management as meant in paragraph (2), the Minister, governor, and regent/mayor are authorized to establish technical performer units in accordance with provisions of legislations.

Part Two
 Planning
 Paragraph 1
 General
 Article 19

- (1) Planning of ground water management shall be compiled to produce a Ground Water Management Plan functioning as guidance and direction for activities on the conservation, utilization, and control of ground water destructive power.
- (2) The Ground Water Management Plan referred to in paragraph (1) shall be compiled in coordination with water resources management plan based on river zones, and constitutes a basis for the compilation of ground water management programs.
- (3) The ground water management program referred to in paragraph (2) shall further be broken down into activity plans of ground water management covering execution plan on the construction, operations and maintenance of means at ground water basins.

Article 20

The ground water management plan referred to in Article 19 paragraph (2) is compiled using the following phases:

- a. inventorying ground water;
- b. stipulation of ground water conservation zones; and
- c. compilation and stipulation of ground water management plan.

Paragraph 2
 Inventorying
 Article 21

- (1) Ground water inventorying referred to in Article 20 letter a is performed to obtain data and information of ground water.

- (2) Ground water data and information referred to in paragraph (1) covers:
- a. quantity and quality of ground water;
 - b. condition of the living environment and potentials related with ground water;
 - c. ground water basins and means on ground water basins;
 - d. ground water management institutions; and
 - e. social economy condition of the community related with ground water.
- (3) Ground water inventorying referred to in paragraph (2) shall be performed on every ground water basin.
- (4) Ground water inventorying referred to in paragraph (2) may be performed thru the following activities:
- a. mapping;
 - b. investigation;
 - c. research;
 - d. explorations; and/or
 - e. data evaluation
- (5) Further provisions on inventorying activities referred to in paragraph (4) shall be regulated with a Regulation of the Minister.

Article 22

- (1) The Minister, governor, or regent/mayor performs ground water inventorying activities in accordance with his/her authority.
- (2) The Minister, governor, or regent/mayor may assign other parties in the performance of ground water inventorying activities referred to in paragraph (1), in accordance with his/her authority.

Article 23

- (1) Result of inventorying activities carried out by the regent/mayor must be reported to the Minister and governor.

- (2) Result of inventorying activities carried out by the governor must be reported to the Minister with copies to the regent/mayor.
- (3) Result of inventorying activities referred to in paragraph (1) and paragraph (2) shall belong to the State.

Paragraph 3

Stipulation of Conservation Zone

Article 24

- (1) ~~Data and information~~ being the result of inventorying activities referred to in Article 23 shall be used as material for the compilation of ground water conservation zones.
- (2) The ground water conservation zone referred to in paragraph (1) shall be compiled and stipulated by the Minister, governor or regent/mayor in accordance with his/her authority after performing public consultation by including technical agencies and related community elements.
- (3) The ground water conservation zone referred to in paragraph (2) contains provisions on conservation and utilization of ground water in ground water basin.
- (4) The ground water conservation zone referred to in paragraph (2) shall be presented in the form of maps classified into:
 - a. ground water protection zone covering ground water additional zone; and
 - b. ground water utilization zone covering safe, vulnerable, critical and damaged zones.
- (5) Ground water conservation that had been stipulated as meant in paragraph (2) may be re-reviewed if there are changes on the quantity, quality, and/or ground water environment in the related ground water basin.

- (6) Further provisions on the procedure of stipulating ground water conservation zone as meant in paragraph (2) shall be regulated with a Regulation of the Minister.

Paragraph 4

Ground Water Management Plan

Article 25

- (1) Ground water management plan referred to in Article 20 letter c contains main points of conservation, utilization, and control of ground water destructive power programs.
- (2) Ground water management plan referred to in paragraph (1) shall be compiled by:
 - a. prioritizing the use of surface water in the related river zone;
 - b. based on the condition and environment of ground water within ground water conservation zone.
- (3) Ground water management plan referred to in paragraph 1 consist of ground water management plan on ground water basins located:
 - a. inter-province or inter-state;
 - b. inter-regency/municipality; and
 - c. in one regency/municipality.

Article 26

- (1) The Minister compiles and stipulate ground water management plan on inter-province or inter-state ground water basins as meant in Article 25 paragraph (3) letter a based on the implementation strategy of ground water management on inter-province or inter-state ground water basin as meant in Article 16 paragraph (1).

- (2) The governor compiles and stipulate ground water management plan on inter-regency/municipality ground water basins as meant in Article 25 paragraph (3) letter b based on the implementation strategy of ground water management on inter-regency/municipality ground water basins as meant in Article 16 paragraph (2).
- (3) The regent/mayor compiles and stipulate ground water management plan in a regency/municipality ground water basin as meant in Article 25 paragraph (3) letter c based on the implementation strategy of ground water management on regency/municipality ground water basins in the regency/municipality as meant in Article 16 paragraph (2).
- (4) Compilation of ground water management plan by the Minister, governor, or regent/mayor referred to in in paragraph (1), paragraph (2), and paragraph (3) shall be performed in accordance with his/her authority thru public consultation by including technical agencies and related community elements.

Article 27

The ground water management plan referred to in Article 26:

- a. shall be compiled based on guidance stipulated by the Minister;
- b. shall consist of long term, medium term and short term plan the period there-of depends on the approval of parties playing a role in the planning for each related ground water basin; and
- c. may be re-reviewed in the event of changes in the implementation strategy of ground water management referred to in Article 17 letter b.

Part Three

Execution

Article 28

- (1) Execution of the ground water management plan referred to in Article 19 paragraph (3) consist of performance activities on construction, operations and maintenance of conservation, utilization and control of ground water destructive power activities.
- (2) Performance of construction, operations and maintenance referred to in paragraph (1) shall be performed by the Minister, governor or regent/mayor in accordance with his/her authority by referring to the ground water management plan of the related ground water basin.
- (3) In the performance of the construction, operations and maintenance referred to in paragraph (2), the Minister, governor or regent/mayor may assign other parties.
- (4) Other than by the Minister, governor or regent/mayor m, performance of construction, operations and maintenance referred to in paragraph (2) may be carried out by permit holders, individuals and communities as ground water users for own interest.
- (5) The performance of construction, operations and maintenance referred to in paragraph (1) is to be made on ground water conservation zones, aquiver and other rock layers having effects on the availability of ground water in ground water basins.

Article 29

- (1) Performance of the construction referred to in Article 28 is aimed to provide means and infra-structures on ground water basins.

- (2) Performance of the construction referred to in paragraph (1) shall be executed based on norms, standards and guidance pursuant to provisions of legislations.

Article 30

- (1) Performance of operations and maintenance referred to in Article 28 is aimed to optimize efforts on conservation, utilization, control of destructive power, and infra-structures in ground water basins.
- (2) Execution of operations and maintenance consist of:
- a. Maintenance of ground water basins;
 - b. Operations and maintenance infra-structures in ground water basins.
- (3) Maintenance of ground water basins referred to in paragraph (2) letter a is performed thru preventive and/or repair activities of damages of aquiver and ground water.
- (4) Operations and maintenance of infra-structures in ground water basins meant in paragraph (2) letter b consist of:
- a. infra-structure operations on ground water basins, covering activities on the arrangement, allocation and provision of ground water;
 - b. infra-structure maintenance on ground water basins, covering preventive activities on damages and/or deterioration of the function of ground water infra-structures.

Article 31

Further provisions on the performance of construction, operations and maintenance referred to in Article 28, Article 29 and Article 30 shall be regulated with a Regulation of the Minister.

Part Four

Monitoring and Evaluation

Article 32

- (1) The Minister, governor or regent/mayor, in accordance with his/her authority, shall perform monitoring on the performance of ground water management.
- (2) The Minister, governor or regent/mayor may assign other parties to perform the monitoring of ground water management referred to in paragraph (1).
- (3) *Monitoring of the performance of ground water management is carried out thru:*
- a. observation;
 - b. taking notes;
 - c. recording;
 - d. review of reports; and/or
 - e. direct observation.
- (4) Monitoring of the performance of ground water management shall be made periodically according to requirements.
- (5) Further provisions on monitoring procedure of the performance of ground water management shall be regulated with a Regulation of the Minister.

Article 33

- (1) The Minister, governor or regent/mayor, in accordance with his/her authority, shall perform evaluation on the performance of ground water management.
- (2) Evaluation on the execution of ground water management referred to in paragraph (1) shall be made thru analysis and valuation of monitoring results.

Article 34

Results of the evaluation of the execution of ground water management shall be used as consideration basis for the enhancement of performance and/or to make reviews on ground water management plan.

Part Five
 Conservation
 Paragraph 1
 General
 Article 35

- (1) Ground water conservation is aimed to maintain the continuity of the presence, support capacity, and functions of ground water.
- (2) Ground water conservation meant in paragraph (1) shall be performed based on ground water management plan.
- (3) Ground water conservation meant in paragraph (1) shall be performed totally on ground water basins covering ground water supplement areas and release areas, thru:
 - a. Protection and preservation of ground water;
 - b. Preservation of ground water; and
 - c. Quality management and control of ground water contamination.
- (4) The Minister, governor or regent/mayor, in accordance with his/her authority, is obliged to perform ground water conservation activities by including the participation of the community.

Article 36

- (1) In order to support ground water conservation activities, monitoring of ground water shall be performed.
- (2) Ground water monitoring referred to in paragraph (1) is aimed to know changes of the quantity and quality and/or environment of ground water.
- (3) The monitoring of ground water referred to in paragraph (1) shall be performed on monitoring wells by methods of:

- a. measuring and recording the position of ground water surface;
- b. examining the physical nature, content of chemical, biological or radioactive elements in ground water;
- c. recording the amount of ground water used or exploited; and/or
- d. measuring and recording changes of ground water environment, such as ground sinking.

- (4) The monitoring of ground water referred to in paragraph (3) besides to be performed on monitoring wells, may also be performed on producing wells.
- (5) Result of the monitoring of ground water referred to in paragraph (3) and paragraph (4) in the form of data records shall be a part of the national, province or regency/municipality ground water information system.
- (6) Result of the monitoring of ground water referred to in paragraph (5) shall be used by the Minister, governor or regent/mayor pursuant to their authority as substance for the evaluation of the performance of conservation, utilization, and control of ground water destructive power.

Article 37

- (1) The monitoring well referred to in Article 36 shall be used as means for the control of ground water use.
- (2) The monitoring well referred to in paragraph (1) must be provided and maintained by the Minister, governor or regent/mayor in accordance with his/her authority.

Article 38

- (1) The monitoring wells referred to in Article 36 paragraph (3) shall be constructed in accordance with the standard stipulated by the Minister and placed within a monitoring well net.

- (2) The Minister, governor or regent/mayor in accordance with his/her authority stipulate monitoring well nets in each ground water basin based on:
- a. Geological and hydro-geological condition of a ground water basin;
 - b. Spread of production wells and intensity of ground water taking; and
 - c. Requirements for the control of ground water use.
- (3) Further provisions on monitoring well net meant in paragraph (1) shall be regulated with a Regulation of the Minister .

Paragraph 2

Protection and Reservation

Article 39

- (1) *Protection and reservation of ground water referred to in Article 35 paragraph (3) letter a is meant to protect and reserve the condition, environment and function of ground water.*
- (2) In order to protect and reserve ground water as meant in paragraph (1), the Minister, governor or regent/mayor, in accordance with his/her authority, shall stipulate ground water reservation areas.
- (3) Performance of the protection and reservation of ground water referred to in paragraph (1) shall be executed by:
- a. maintaining the support capacity and function of ground water supplement area;
 - b. *maintaining* the support capacity of aquiver; and/or
 - c. restoring the condition and environment of ground water in critical zones and *damaged zones*.

Article 40

- (1) In order to maintain the support capacity and function of ground water supplement areas as referred to in Article 39 paragraph (3) letter a, the following method shall be performed:
- a. securing the capability of ground water supplements;
 - b. prohibiting drilling, digging or other activities within a radius of 200 (two hundred) meters from the location of springs; and
 - c. limiting the use of ground water, except for daily basic needs.
- (2) Maintaining the support capacity of aquiver as referred to in Article 39 paragraph (3) letter b is performed by controlling activities likely to disturb aquiver systems.
- (3) Restoring the condition and environment of ground water in critical zones and damaged zones referred to in Article 39 paragraph (3) letter b is performed with the following methods:
- a. prohibiting the taking of new ground water and reducing in stages the taking of new ground water in critical ground water zones;
 - b. prohibiting the taking of ground water in damaged ground water zones; and
 - c. creating artificial supplements.

Paragraph 3

Preservation

Article 41

- (1) Ground water preservation as meant in Article 35 paragraph (3) letter b is aimed to secure the existence and continuity of ground water;

- (2) Ground water preservation as meant in paragraph (1) is performed with the following methods:
- a. economical use of ground water;
 - b. increasing the capacity of ground water supplements; and/or
 - c. controlling the use of ground water.
- (3) The Minister, governor or regent/mayor, in accordance with his/her authority, shall motivate ground water users to exercise ground water preservation.

Article 42

- (1) Economy use of ground water as meant in Article 41 paragraph (2) letter a is performed with the following methods:
- a. using ground water effectively and efficiently for various requirements;
 - b. reducing the use of, re-using, and recycling ground water;
 - c. taking ground water according to necessities;
 - d. using ground water as the last resort;
 - e. providing incentives to performers of economical use of ground water;
 - f. providing dis-incentives to ground water squanderers; and/or
 - g. developing and applying a technology on the economical use of water.
- (2) Further provisions on the economical use of ground water referred to in paragraph (1) shall be regulated with a Regulation of the Minister.

Article 43

- (1) Increasing the capacity of ground water supplements referred to in Article 41 paragraph (2) letter b is

performed by increasing the number of surface water to become absorption water thru artificial supplements.

- (2) Further provisions on artificial supplement referred to in paragraph (1) shall be regulated with a Regulation of the Minister.

Article 44

- (1) Control on the use of ground water referred to in Article 41 paragraph (2) letter c is performed with the following methods:
- a. maintaining the balance between supplement, flow and release of ground water
 - b. applying permit system on the use of ground water;
 - c. limiting the use of ground water by still prioritizing the fulfillment of daily basic needs;
 - d. regulating the location and depth of aquifer sapping;
 - e. regulating the distance between drilling wells or digging of ground water;
 - f. regulating the depth of ground water drilling or digging; and
 - g. applying a progressive tariff on the use of ground water pursuant to consumption level.
- (2) Control on the use of ground water referred to in paragraph (1) particularly shall be exercised on:
- a. parts of ground water basin where the taking of ground water is intensive;
 - b. ground water release area undergoing degradation; and
 - c. aquifer where its ground water is greatly exploited.
- (3) Further provisions on the control of ground water use referred to in paragraph (1) and paragraph (2) shall be regulated with a Regulation of the Minister.

Paragraph 4

Quality Management and Contamination Control

Article 45

- (1) Quality management and contamination control of ground water meant in Article 35 paragraph (3) letter c is meant to secure and restore ground water quality in accordance with its natural condition.
- (2) Quality management and contamination control of ground water as meant in paragraph (1) is performed with the following methods:
 - a. prevention of ground water contamination;
 - b. tackling ground water contamination; and/or
 - c. restoration of the quality of contaminated ground water.

- (3) Further provisions on quality management and contamination control of ground water referred to in paragraph (2) shall be performed in accordance with provisions of legislations in the field of living environment.

Article 46

In order to prevent ground water contamination, ground water users must close all drilled wells or dug wells where the quality of its ground water had been contaminated.

Part Six.....

(To be continued)

=====(D)=====

GROUND WATER

(R.I. Government Regulation No. 43 Year 2008, dated May 23, 2008)

[Continued from Business News No. 7780-7781 pages 17A-30A]

Part Six

Utilization

Paragraph 1

General

Article 47

- (1) The utilization of ground water is aimed to make use of ground water by prioritizing the fulfillment of daily basic requirements of the community justly and continuously.
- (2) The utilization of ground water shall be performed based on a ground water management plan;
- (3) The utilization of ground water referred to in paragraph (1) shall be performed thru:
 - a. Order of usage
 - b. Supply;
 - c. Usage;
 - d. Development; and
 - e. Exploitation.
- (4) In the utilization of ground water, the Minister, governor or regent/mayor in accordance with his/her authority, must include the community.

Paragraph 2

Order of Usage

Article 48

- (1) Order of usage of ground water as meant in Article 47 paragraph (3) letter a is aimed to stipulate ground water utilization zones and ground water allotment in ground water basins compiled based on ground water conservation zones.

- (2) The stipulation of ground water utilization zones is made by taking into consideration:
 - a. spread and characteristics of aquifers;
 - b. hydro-geology condition;
 - c. ground water inventorying and condition;
 - d. ground water protection zone;
 - e. water requirement for the public and for development;
 - f. data and information of inventorying results on ground water basins; and
 - g. availability of surface water.
- (3) The ground water utilization zone referred to in paragraph (1) constitutes as reference for the compilation of plans on drilling, digging, use, exploitation, and development of ground water, as well as the compilation of regional spatial lay-out plan.
- (4) The Minister, governor or regent/mayor in accordance with his/her authority shall stipulate ground water utilization zones as referred to in paragraph (1).
- (5) The stipulation of ground water utilization zones referred to in paragraph (4) shall be made by paying due attention to consideration of the water resources management coordination forum for the related river zones.
- (6) In the event a water resources management coordination forum for the related river zone has not yet been formed, the stipulation of ground water utilization zone is entitled to be made directly by the Minister, governor or regent/mayor in accordance with his/her authority.

- (7) Further provision on the stipulation of the ground water utilization zone referred to in paragraph (4) shall be regulated with a regulation of the Minister.

Article 49

- (1) The stipulation of ground water allotment referred to in Article 48 paragraph (1) is made by the Minister, governor or regent/mayor in accordance with his/her authority by considering:
- ground water quantity and quality;
 - aquifer supporting capacity against ground water taking;
 - number and spread of populace and rate of growth;
 - projected requirement on ground water; and
 - utilization of existing ground water.
- (2) The stipulation of ground water allotment of a ground water basin shall be coordinated by the water resources management coordination forum for related river zones.
- (3) In the event a water resources management coordination forum for a related river zone has not yet been formed, the stipulation of ground water allotment is entitled to be made directly by the Minister, governor or regent/mayor in accordance with his/her authority
- (4) The Minister, governor or regent/mayor in accordance with his/her authority shall perform control on the execution of provisions on ground water allotment in the ground water basin referred to in paragraph (1).

Paragraph 3

Supply

Article 50

- (1) The supply of ground water referred to in Article 47 paragraph (3) letter b is aimed to meet requirements

for water from the utilization of ground water for various necessities pursuant to its quantity and quality.

- (2) The supply of ground water in any ground water basin shall be performed in accordance with ground water order of use to fulfill at least the following:
- daily basic requirements;
 - peasants' farming;
 - sanitation of the environment;
 - industries;
 - mining; and
 - tourism.
- (3) The supply of ground water for daily basic requirements shall be the main priority above all other requirements.
- (4) Provision of ground water shall be performed by observing the continuity of existing supply of ground water.
- (5) The Minister, governor or regent/mayor in accordance with his/her authority shall stipulate a priority scale of the supply of ground water.

Article 51

- (1) Plan on ground water supply is to be compiled by observing the plan on surface water supply in the related river zone.
- (2) Plan on ground water supply referred to in paragraph (1) shall be compiled by the Minister, governor or regent/mayor in accordance with his/her authority.

Paragraph 4

Use

Article 52

- (1) The use of ground water referred to in Article 47 paragraph (3) letter c is aimed for the utilization of ground water and infrastructures on ground water basins.

- (2) Use of ground water consists of the use of ground water and exploitation of ground water.
- (3) Use of ground water referred to in paragraph (1) shall be executed in accordance with ground water order of use and supply of ground water having been stipulated for a ground water basin.
- (4) Use of ground water referred to in paragraph (1) shall be performed by prioritizing the utilization of ground water from deep aquifers the taking there-of shall not exceed the aquifer supporting capacity against ground water taking.
- (5) Rate of ground water taking is determined based on:
- a. aquifer supporting capacity against ground water taking;
 - b. condition and environment of ground water
 - c. allocation of ground water use for future necessities; and
 - d. utilization of existing ground water.
- (6) Further provision on the use of ground water shall be regulated with a regulation of the Minister.

Article 53

- (1) The use of ground water referred to in Article 52 paragraph (1) is performed thru drilling or digging for ground water.
- (2) The drilling or digging for ground water referred to in paragraph (1) must take into account the type and nature of rocks, hydro-geology, location and potentials of contamination sources and the condition of the surrounding environment.
- (3) The drilling or digging referred to in paragraph (1) is prohibited to be performed in ground water protection zones meant in Article 24 paragraph (4) letter a.

- (4) Further provision on drilling or digging for ground water shall be regulated with a Regulation of the Minister.

Article 54

- (1) The use of ground water referred to in Article 52 paragraph (2) is an activity on the use of ground water aimed to fulfill basic daily requirements, peasant farming, and non-business activities.
- (2) The use of ground water for peasant farming referred to in paragraph (1) may only be performed if surface water is not enough.
- (3) The use of ground water referred to in paragraph (1) is entitled to be performed after possessing a right to use water from the utilization of ground water.
- (4) Right to use water from the utilization of ground water for non-business activities referred to in paragraph (1) can be obtained with a permit issued by the regent/ mayor for the use of ground water.
- (5) Permit for the use of ground water referred to in paragraph (4) can be issued to individuals, business entities, government agencies or social institutions.

Article 55

- (1) Permit for right of water use from the utilization of ground water is not required if it is for daily basic requirements of individuals and peasant farming.
- (2) Right of water use from the utilization of ground water to meet daily basic requirements for individuals meant in paragraph (1) is determined as follows:
- a. use of ground water from drilling wells having a diameter of less than two inches (less than 5 cm);
 - b. use of ground water from wells dug by the use of manpower;

c. use of ground water less than 100 m³ per family not using a centralized distribution system.

(3) Right of water use from the utilization of ground water to fulfill requirements of peasant farming meant in paragraph (1) is determined as follows:

- a. The well is located within the farming area, far from residential;
- b. usage does not exceed two (2) liters per second per family in the event surface water is not sufficient; and
- c. rate of ground water taking does not disturb daily basic requirements of the local community.

Paragraph 5

Development

Article 56

- (1) The development of ground water in ground water basin referred to in Article 47 paragraph (3) letter d is aimed to improve the utility of ground water functions to meet the supply of ground water.
- (2) The development of ground water referred to in paragraph (1) is prioritized to meet daily basic needs and peasant farming.
- (3) The development of ground water referred to in paragraph (1) may be performed only as long as the potentials of ground water still enable the withdrawal thereof safely and not causing any damage to the ground water and the living environment.
- (4) The development of ground water referred to in paragraph (2) shall be performed based on ground water management plan and region spatial layout plan.
- (5) The development of ground water referred to in paragraph (2) must take into consideration the following:

a. aquifer supporting capacity against ground water taking;

b. condition and environment of ground water

c. ground water protection zone;

d. projected ground water requirement;

e. utilization of existing ground water.

f. Data and information of inventorying results of ground water basin; and

g. availability of surface water.

(6) The development of ground water referred to in paragraph (3) shall be executed thru the following activity phases:

a. hydrogeology survey;

b. ground water exploration thru geophysical survey and exploration drilling or digging;

c. exploitation drilling or digging; and/or

d. construction of infrastructures for the utilization of ground water

(7) Further provision on technical matters on the development of ground water shall be regulated with a regulation of the Minister.

Paragraph 6

Exploitation

Article 57

(1) Ground water exploitation meant in Article 47 paragraph (3) letter e is an activity on the use of ground water for business purposes aimed to meet requirements of:

a. production raw material;

b. utilization of potentials;

c. business media; or

d. aid material or production process

- (2) Ground water exploitation referred to in paragraph (1) is entitled to be carried out as long as the supply of ground water for daily basic needs and peasant farming of the local community are fulfilled.
- (3) The exploitation referred to in paragraph (1) can be in the form of:
- ground water use at a certain location;
 - aquifer sapping from a certain depth; and/or
 - utilization of ground water power at a certain location.
- (4) Ground water exploitation must observe the following:
- plan on the management of ground water;
 - technical and economical feasibility;
 - social function of ground water;
 - preservation of ground water condition and environment; and
 - other provisions in accordance with provisions of legislations.

Article 58

- (1) Ground water exploitation may be executed after possessing a right for water use from the utilization of ground water.
- (2) The right for water use from the utilization of ground water referred to in paragraph (1) can be obtained thru a ground water exploitation permit issued by the regent/mayor.
- (3) The ground water exploitation permit referred to in paragraph (2) may be issued to individuals or business entities.

Article 59

Ground water exploitation permit is not required

for follow-up water and/or drying (de-watering) for exploration and exploitation activities in the field of mining and energy.

Article 60

The Minister, governor, or regent/mayor, in accordance with his/her authority, stipulates the allocation of ground water use on ground water basins for the use or exploitation of ground water.

Part Seven

Destructive Power Control

Article 61

- (1) Control of ground water destructive power is aimed to prevent and tackle salt water intrusion, and to recover ground water condition due to salt water intrusion, and to prevent, stop, or reduce the occurrence of ground sinking.
- (2) The control of ground water destructive power referred to in paragraph (1) is exercised by controlling ground water taking and increasing the amount of ground water supplements to hamper or to decrease the rate of ground water surface subsidence.
- (3) The Minister, governor and regent/mayor shall exercise control of ground water destructive power.

Article 62

- (1) In order to prevent the salt water intrusion as meant in Article 61 paragraph (1), ground water taking shall be limited in shore areas causing disturbances on the equilibrium of the fresh water surface and the salt water surface.

- (2) In order to prevent salt water intrusion referred to in Article 61 paragraph (1), it is prohibited to take ground water at shore areas.
- (3) Recovery of ground water condition due to salt water intrusion as meant in Article 61 paragraph (1), can be performed by creating artificial absorptions or injection wells in areas where its ground water had been contaminated with salt water.

Article 63

- (1) In order to prevent ground water subsidence as meant in Article 61 paragraph (1), ground water taking shall be reduced for holders of ground water use permit or ground water exploitation permit on critical zones or damaged zones.
- (2) In order to stop the occurrence of ground water subsidence as meant in Article 61 paragraph (1), ground water taking must be stopped.
- (3) To reduce the occurrence of ground water subsidence referred to in Article 61 paragraph (1), artificial supplements must be created.

Article 64

Further provision on control of ground water destructive power referred to in Article 61, Article 62, and Article 63 shall be regulated with a regulation of the Minister.

Article 65

In cases it endangers the environment, the Minister, governor, or regent/mayor in accordance with his/her authority shall take emergency actions as efforts in the control of ground water destructive power.

Article 66

Every ground water user must repair the condition and environment of ground water damaged due to the use of ground water it performed by performing tackling activities on salt water intrusion, and the recovery of salt water intrusion effects as meant in Article 62 and/or take actions to stop and reduce ground water subsidence as meant in Article 63.

CHAPTER IV

PERMITS

Part One

Procedure to Obtain Permit

Article 67

- (1) In order to obtain ground water use permit or ground water exploitation permit, the requestor shall submit an application in writing to the regent/mayor with copies to the Minister and governor.
- (2) The application referred to in paragraph (1) must be attached with:
- allotment and requirement for ground water;
 - plan on the performance of ground water drilling or digging; and
 - Environment Management Efforts (UKL=Upaya Pengelolaan Lingkungan) or Environment Monitoring Efforts (UPL = Upaya Pemantauan Lingkungan), or Analysis on Environmental Impact (Amdal = Analisis Mengenai Dampak Lingkungan) in accordance with provisions of legislations.
- (3) In order to obtain ground water use permit or ground water exploitation permit, the requestor shall be charged with permit retribution in accordance with provisions of legislations.

Article 68

- (1) Ground water use permit or ground water exploitation permit is issued by the regent/mayor on condition:
- a. on any inter-province and inter-state ground water basin, after receiving a technical recommendation containing an approval of the Minister;
 - b. on any inter-regency/municipality ground water basin, after receiving a technical recommendation containing an approval of the governor;
 - c. on any ground water basin in the area of a regency/municipality, after receiving a technical recommendation containing an approval of the regency/municipality service in charge of ground water.
- (2) The Minister, governor or service in charge of ground water must give the technical recommendation referred to in paragraph (1) containing an approval or rejection to give the permit based on ground water conservation zones.
- (3) The permit referred to in paragraph (1) shall contain at least the name and address of the requestor, location point of drilling or digging plan, discharge of ground water use or exploitation, and provisions on obligations and rights.
- (4) Copies of the permit referred to in paragraph (1) must be submitted to the Minister and governor.

Article 69

Further provision on permits and technical recommendations shall be regulated with a regulation of the Minister.

Article 70

- (1) Every requestor for ground water use permit or ground water exploitation permit taking ground water in a large volume must perform ground water exploration.
- (2) Result of the exploration referred to in paragraph (1) shall be used as basis for the planning of:
- a. depth of ground water drilling or digging;
 - b. placement of filters in construction works; and
 - c. discharge and quality of ground water to be utilized.

Article 71

- (1) Holders of ground water use permit or ground water exploitation permit are entitled to perform ground water drilling and digging only at stipulated locations.
- (2) The ground water drilling and digging referred to in paragraph (1) shall only be performed by government agencies, individuals or business entities meeting the qualification and classification required to perform ground water drilling and digging.
- (3) The qualification and classification to perform ground water drilling and digging referred to in paragraph (2) may be obtained thru:
- a. certification of ground water drilling installation; and
 - b. competence certification of ground water drillers.
- (4) Performance of the certification referred to in paragraph (3) letter a and letter b is executed in accordance with provisions of legislations.
- (5) Further provision on qualification and classification referred to in paragraph (3) shall be regulated with a regulation of the Minister.

Article 72

Period for ground water use permit or ground water exploitation permit may be granted for three (3) years at the most and extendable.

Article 73

- (1) Extension of the permit referred to in Article 72 shall be issued by the regent/mayor after receiving a technical recommendation containing approval referred to in Article 68 paragraph (1) and paragraph (2).
- (2) In issuing the technical recommendation, the Minister, governor or service must observe:
 - a. availability of ground water; and
 - b. ground water condition and environment.

Article 74

- (1) The regent/mayor shall make an evaluation on issued ground water use permits or ground water exploitation permits.
- (2) The evaluation referred to in paragraph (1) shall be performed commencing from the drilling or digging phase activities.

Article 75

- (1) The evaluation referred to in Article 74 shall be made on the discharge and quality of produced ground water to re-stipulate the discharge to be used or exploited as stated in the permit.
- (2) The evaluation referred to in paragraph (1) shall be made based on reports on the result of the execution of ground water drilling and digging;
- (3) Report on the result of the execution of ground water drilling and digging referred to in paragraph (2) shall contain at least:

- a. lithography cross-section and well cross-section;
- b. results of ground water physical and chemical analysis;
- c. result of pumping test analysis on tapped aquifers; and
- d. drawing of well construction with constructions above it.

Part Two

Obligations and Rights of Permit Holders

Article 76

Every holder of ground water use permit or ground water exploitation permit has the right to obtain and use ground water in accordance with provisions stated in the permit.

Article 77

Every holder of ground water use permit or ground water exploitation permit has the obligations to:

- a. submit a report on the result of ground water drilling and digging activities to the regent/mayor;
- b. submit a report on the discharge of use or exploitation of ground water each month to the regent/mayor with copies to the Minister or governor;
- c. install water meters at each producing well on the use or exploitation of ground water;
- d. build an absorption well at a location determined by the regent/mayor;
- e. participate in the provision of ground water monitoring well;
- f. pay service costs on the management of ground water; and

g. report

- g. report to the regent/mayor if in the execution of ground water drilling and digging and during the use and exploitation of ground water, matters likely to endanger the environment are found.

Article 78

- (1) Every holder of ground water exploitation permit has the obligations to provide water as of at least 10% (ten percent) of the discharge limit of ground water use or exploitation stipulated in the permit to meet daily basic needs of the local community.
- (2) Technical matters on the execution of providing the ground water referred to in paragraph (1) shall be regulated by the regent/mayor.

Part Three

Permit Expiration

Article 79

- (1) Ground water use permit or ground water exploitation permit shall expire if:
 - a. validity term expired and extension there-of was not submitted;
 - b. permit was returned; or
 - c. permit was confiscated.
- (2) Expiration of the ground water use permit or ground water exploitation permit referred to in paragraph (1) does not free the obligations of permit holders to perform obligations not yet fulfilled in accordance with provisions of legislations.

CHAPTER V

GROUND WATER INFORMATION SYSTEM

Article 80

- (1) To support the management of ground water, the Minister,

governor and regent/mayor shall operate a ground water information system.

- (2) The ground water information system referred to in paragraph (1) is a part of water resources information net managed in a data management center at nation, province and regency/municipality levels.
- (3) The ground water information system referred to in paragraph (1) covers data and information on:
 - a. configuration of ground water basin;
 - b. hydrogeology;
 - c. ground water potentials;
 - d. ground water conservation;
 - e. ground water utilization;
 - f. ground water condition and environment;
 - g. ground water control and supervision;
 - h. policy and arrangements in the aspect of ground water; and
 - i. community socio-cultural and economy activities related with ground water.

Article 81

The management of ground water information system is performed thru the following phases:

- a. data taking and collection;
- b. data storage and processing;
- c. data renewal; and
- d. issuance and dissemination of data and information.

Article 82

- (1) The Minister, governor and regent/mayor shall provide ground water information to all parties having interests on ground water;

- (2) To perform the activities on the provision of information referred to in paragraph (1), all government agencies, organizations, institutions, individuals, and business entities carrying out activities related with ground water must submit reports on the result of their activities to the Minister, governor and regent/mayor.
- (3) Government agencies, organizations, institutions, individuals, and business entities carrying out activities related with ground water are obliged to ensure the accuracy, truth, and timeliness of submitted information.
- (4) Further provision on ground water information system shall be regulated with a regulation of the Minister.
- (4) Planning costs referred to in paragraph (2) letter b are costs required for activities on the compilation of technical policy, execution strategy, and ground water management plan.
- (5) Construction performance costs referred to in paragraph (2) letter c are costs for the provision of means and infrastructures on ground water basin for conservation, utilization, and prevention of ground water subsidence activities.
- (6) Operations and maintenance costs referred to in paragraph (2) letter d are costs for the maintenance of ground water basin and operations and maintenance costs of infrastructures on ground water basin.
- (7) Monitoring, evaluation, and community empowerment costs referred to in paragraph (2) letter e are costs required to monitor and evaluate the management of ground water, and costs for the empowerment of the community in the management of ground water.

CHAPTER VI

FUNDING

Article 83

- (1) Funding of ground water management is stipulated based on factual requirements for ground water management.
- (2) Types of ground water management funding consist of:
- a. information system costs;
 - b. planning costs;
 - c. performance of construction costs;
 - d. operations and maintenance costs; and
 - e. monitoring, evaluation, and community empowerment costs.
- (3) Information system costs referred to in paragraph (2) letter a are costs required for data taking and collection, data storage and processing, data renewal, and issuance and dissemination of data and information.

Article 84

- (1) Source of budget to fund the activities on ground water management referred to in Article 83 can be in the form of:
- a. Government/regional government budget in accordance with its authority;
 - b. Private sector budget;
 - c. Revenue of service of the management of ground water.
- (2) The Government or regional government budget referred to in paragraph (1) letter a comes from:
- a. APBN (Anggaran Pendapatan dan Belanja Negara – State Revenue and Expenditure Budget) to fund ground water management activities on inter-province and inter-state ground water basin;

b. Provincial

- b. Provincial APBD (Anggaran Pendapatan dan Belanja Daerah – Region Revenue and Expenditure Budget) to fund ground water management activities on inter-regency/municipality ground water basin;
 - c. Regency/municipality APBD to fund ground water management on ground water basin in a regency/municipality.
- (3) The private sector budget referred to in paragraph (1) letter b originates from budget of the private sector for its participation in the management of ground water.
- (4) Service revenue of ground water management referred to in paragraph (1) letter c is the fund collected by the Government from permit holders to fund the performance of construction, operations and maintenance of ground water conservation activities.
- (5) Service revenue of ground water management referred to in paragraph (4) is Non-Tax State Revenue (PNBP = Penerimaan Negara Bukan Pajak).
- (6) Provisions on the calculation and procedure of PNBP collection referred to in paragraph (5) shall be exercised in accordance with provisions of legislations.
- (7) Provisions on the management and use of PNBP from service revenue of ground water management shall be regulated with a regulation of the Minister.

Article 85

In the event of urgent requirements for the management of ground water on inter-state, inter-province, inter-regency/municipality, and in a regency/municipality ground water basin, the management thereof shall be stipulated jointly by the Government, province regional

government, regency/municipality regional government concerned in the form of cooperation.

CHAPTER VII

EMPOWERMENT, CONTROL AND SUPERVISION

Part One

Empowerment

Article 86

- (1) The Minister, governor, or regent/mayor in accordance with his/her authority shall empower stake-holders to improve their performance in the management of ground water.
- (2) The empowerment referred to in paragraph (1) shall be performed in the form of elucidations, education, training, nurturance, and accompanying.
- (3) Community groups on own-initiative can perform empowerment efforts for its own sake.
- (4) Empowerment can be exercised in the form of coordinated cooperation between the Government, provincial government and regency/municipality government.

Part Two

Control

Article 87

- (1) The Minister, governor, or regent/mayor in accordance with his/her authority shall exercise control on the use of ground water.
- (2) The regent/mayor shall submit reports on the performance of control on the use of ground water to the governor periodically with a copy to the Minister.
- (3) The governor shall submit reports on the performance of control on the use of ground water to the Minister periodically.

Part Three

Supervision

Article 88

- (1) Supervision on the management of ground water is aimed to ensure the conformity of the performance of ground water management with legislations particularly those concerning administrative and technical provisions of ground water management.
- (2) The supervision referred to in paragraph (1) shall be exercised by the Minister, governor and regent/mayor by including the participation of the community.

Article 89

- (1) The Minister shall perform nurturance and supervision on the performance of ground water management at national level.
- (2) The governor shall perform nurturance and supervision on the performance of ground water management in his/her region.
- (3) The nurturance and supervision referred to in paragraph (1) and paragraph (2) shall be carried out on the performance of:
 - a. ground water conservation;
 - b. ground water utilization;
 - c. control of ground water destructive power; and
 - d. ground water information system.
- (4) The Minister or governor shall perform nurturance and supervision on the use and exploitation of ground water based on provisions set forth in the technical recommendation for the issuance of ground water use permit or ground water exploitation permit by the regent/mayor.

Article 90

- (1) The regent/mayor shall perform nurturance and supervision on the performance of ground water management, particularly on those related with provisions in the ground water use permit or the ground water exploitation permit.
- (2) The nurturance and supervision referred to in paragraph (1) shall be carried out on:
 - a. performance of ground water drilling and digging, use and or exploitation of ground water;
 - b. activities that can cause damages to ground water environment; or
 - c. performance of environment management, environment monitoring and or analysis on environmental impact.

Article 91

Further provisions on nurturance and supervision technical matters on the performance of ground water management shall be regulated with a regulation of the Minister.

CHAPTER VIII

ADMINISTRATIVE SANCTIONS

Article 92

- (1) The regent/mayor shall impose an administrative sanction on any permit holder violating the provisions referred to in Article 67, Article 70, Article 71, Article 77, or Article 78.
- (2) The administrative sanctions referred to in paragraph (1) may be in the form of:
 - a. written warning;
 - b. temporary cessation of all activities; and
 - c. revocation of permit.

Article 93.

Article 93

- (1) The administrative sanction in the form of written warning referred to in Article 92 paragraph (2) letter a will be imposed on permit holders violating the provisions referred to in Article 67, Article 70, Article 71, Article 77, or Article 78.
- (2) The administrative sanction in the form of written warning referred to in paragraph (1) will be imposed for three (3) times in succession for a period of one (1) month respectively.
- (3) Permit holders not performing its obligations after the end of the period of the third written warning referred to in paragraph (2) shall be subjected to a sanction in the form of temporary cessation of all activities.
- (4) The administrative sanction in the form of temporary cessation of all activities referred to in paragraph (3) shall be imposed for a period of three (3) months.
- (5) Permit holders not performing its obligations after the end of the period of the temporary cessation of all activities referred to in paragraph (3) shall be subjected to a sanction in the form of permit revocation.

CHAPTER IX

TRANSITIONAL PROVISIONS

Article 94

With the stipulation of this Government Regulation, all permits related with ground water management having been issued prior to the stipulation of this Government Regulation is declared as still in effect until the expiration of its validity date.

CHAPTER X

CLOSING PROVISIONS

Article 95

By the time this Government Regulation comes to effect, Government Regulation No. 22 Year 1982 concerning Water Structure Regulation (R.I. Statute Book Year 1982 No. 37, Supplement to R.I. Statute Book No. 3225) is revoked and declared as not in effect.

Article 96

By the time this Government Regulation commences to come to effect, all legislations in the field of ground water constituting as execution regulation of Government Regulation No. 22 Year 1982 concerning Water Structure Regulation (R.I. Statute Book Year 1982 No. 37, Supplement to R.I. Statute Book No. 3225) is declared as still in effect to the extent it is not contradictory to or a new execution regulation based on this Government Regulation has not yet been issued.

Article 97

This Government Regulation commences to come to effect from the date of enactment.

For public cognizance, this Government Regulation shall be announced in the Statute Book of the Republic of Indonesia.

Stipulated in Jakarta

On May 23, 2008

PRESIDENT OF THE REPUBLIC OF INDONESIA.

Sgd

DR. H. SUSILO BAMBANG YUDHOYONO

Enacted in Jakarta

On May 23, 2008

MINISTER OF LAW AND HUMAN RIGHTS
OF THE REPUBLIC OF INDONESIA

Sgd

ANDI MATTALATTA

STATUTE BOOK OF THE REPUBLIC OF INDONESIA

YEAR 2008 NO. 83

ELUCIDATION.....

(To be continued)

====(D)====

GROUND WATER

(R.I. Government Regulation No. 43 Year 2008, dated May 23, 2008)

[Continued from Business News No. 7783 pages 12A-25A]

ELUCIDATION

Of

R.I. Government Regulation No. 43 Year 2008
Concerning
GROUND WATER

I. GENERAL

1. Ground water has an important role for the life and living of the Indonesia people, because it functions as one of the daily basic needs.

The availability of ground water in Indonesia is quite abundant, however not in every place in accordance with the geological condition and rainfall.

Ground water is found under ground surface, on-shore scattered up to below sea bottom following the spread and characteristics of soil or rock layers in ground water basins.

Ground water can exist in saturated zones, unsaturated zones, or crevices and canals in the form of underground rivers in limestone areas.

In the basin, ground water can fill rivers, dams or likes, and likewise rivers, dams or likes can fill aquifer. Therefore, the management of ground water must be performed integrated with the management of surface water.

2. An area can be called as a ground water basin only if it meets the following criteria: hydrogeology border controlled by geological condition and/or ground water hydraulic condition, having a recharge area and ground water release area in one

ground water formation system; as well as possessing an aquifer system unity.

Based on the above criteria, in accordance with Article 12 Paragraph (2) of Law No. 7 Year 2004 concerning Water Resources, ground water basin are stipulated as basis for the management of ground water. Ground water management covers activities on planning, execution, Monitoring and evaluation on activities of conservation, empowerment, and control of ground water destructive power. These activities are aimed to realize the preservation, continuity of the availability and utility of ground water continuously.

3. Ground water management based on ground water basin, performed based on ground water management policy and strategy. Ground water management policy is compiled and stipulated integrated in the water resources management policy at national, province as well as regency / municipality level. Ground water management policy shall further be broken down in technical policy on the management of ground water compiled and stipulated by the Minister, governor, or regent/mayor as directives for the technical management of ground water covering conservation, empowerment, control of control of ground water destructive power and ground water information system.
4. The regulating of ground water management is directed to realize a balance between the conservation and utilization of ground water. The technical

performance of these activities is required to be adjusted to the characteristics of ground water covering the availability, spread, potentials covering ground water quality and quantity and the environment of ground water. However, since its availability in rocks where the formation there-of is closely related with geological processes, the management of ground water requires arrangements based on geology and hydro-geology norms.

5. *The arrangement of ground water conservation is directed to support efforts to maintain the continuity of the availability, support capacity and functions of ground water by means of activities on the protection and reservation of ground water, ground water preservation, and management of the quality the and control of ground water contamination. Ground water conservation efforts are carried out to prevent damages to the condition and environment of ground water likely to occur due to a shrinkage of ground water availability followed by a drastic sinking of ground water surface, and if permitted to continue, can cause negative impacts in the form of ground water contamination, salt water intrusion, aridity, and ground sinking.*
6. *The arrangement of ground water empowerment is directed to support efforts to effectively and efficiently use ground water on a continued basis continuously, particularly to meet daily life basic needs, though it is not closed to other possibilities such as farming, environmental sanitation, industries, mining and tourism. Ground water empowerment is performed thru activities on the administering, supply, use, development and exploitation of ground water. However, since it is below ground surface,*

withdrawal or exploitation for utilization or use efforts require a process as performed in mining activities covering activities on digging or drilling, installing well construction, etc.

7. *Basically, ground water has no such destructive potentials as surface water, however ground water destructive power will occur if the condition and environment of the ground water are disturbed, both due to withdrawing water exceeding its support capacity, contamination, and results of activities of nature. Considering that ground water exists beneath ground surface, damages to ground water cannot be seen directly, hence if exploited uncontrolled, it can cause a large negative impact, and therefore it will be difficult to perform rehabilitation or recovery efforts.*
8. *The arrangement of ground water permit is directed to bring into order the implementation of the right to use water from the utilization of ground water. Basically, a ground water permit functions as a legalization on the ownership of the right to use water from the utilization of ground water.. The right to use water from the utilization of ground water, to the extent it is to meet daily basic needs for individuals or for peasant farming that are based on certain terms, may be obtained without any requirement for a permit. The right to use water where the utilization of ground water is made thru ground water drilling, digging or the use there-of changes the condition and environment of ground water and in a large volume, must be obtained thru a permit. And so is the right to exploit water from the utilization of ground water: it must be obtained thru a permit.*

9. Technical recommendation is implemented on ground water permitting to regulate its use as a conservation effort of ground water based on the ground water condition and environment in ground water conservation zones. Technical recommendation is a technical requirement that is binding in nature given to the regent/mayor in the issuance of ground water use permit or ground water exploitation permit. Permits issued on ground water basins in a regency / municipality must be accompanied with a technical recommendation from the local agency having the authority.

Permits issued on an inter-regency/municipality ground water basin must be accompanied with a technical recommendation from the governor.

Permits issued on inter-province or inter-state ground water basin must be accompanied with a technical recommendation from the Minister.

10. Ground water information system regulation is directed for the storage, processing, provision, and dissemination of ground water data and information as an effort to support ground water management. Ground water data and information consists of the configuration of ground water basin, hydro-geology, ground water potentials, ground water conservation, ground water utilization, condition and environment of ground water, control and supervision on ground water, policies and regulations on ground water, and social economy and culture activities of the community related with ground water. Such ground water data and information are obtained from inventorying activities, thru mapping, survey, research, exploration as well as data evaluation.

11. Scope of the arrangement in this Government Regulation covers: stipulation of ground water management policy, stipulation of ground water basins, stipulation of ground water management strategy, ground water management, ground water information system, and the empowerment, control and supervision on ground water management.

II. ARTICLE BY ARTICLE

Article 1 and Article 2

Self-explanatory

Article 3

Paragraph (1)

The principle of integration of ground water with surface water in this provision covers the performance of conservation, empowerment and control of ground water destructive power, by observing the authority and responsibility of the agency in charge according to its primary duty and function.

Paragraph (2)

Self-explanatory

Article 4

Self-explanatory

Article 5

Paragraph (1)

Ground water management policy is a decision that is fundamental in nature to achieve an objective, to perform activities or to overcome certain problems in

the context of performing ground water management.

Paragraph (2) and Paragraph (3)

Self-explanatory

Paragraph (4)

Included in those regulated in the government regulation on the management of water resources are, among others, policy compilation and stipulation process, pattern and management plan of water resources, as a reference in the process of compiling and stipulating the policy, strategy, and management plan of ground water.

Paragraph (5) and Paragraph (6)

Self-explanatory

Article 8

Letter a

"Hydro-geology border" is a physical border of ground water management area.

Hydro-geology border can be in the form of a border between perforated rocks and non-perforated rocks, ground water separator border, and borders formed by geological structures covering, among others, slope of rock layers, folds, and faults.

Letter b

"Ground water recharge" area is a ground water protection zone, where-in ground water may not be utilized, whereas water release area is an area where it can be utilized in general.

Letter c

"Aquifer system" is an aquifer composition unit, including water proof rock layers existing there-in. Aquifer can be in an unconfined and/or confined condition.

Article 9

Paragraph (1)

Self-explanatory

Paragraph (2)

Letter a

Identification of ground water basin covers, among others, survey and evaluation activities on hydro-geology data.

Letter b

Determination of ground water basin borders covers, among others, activities on the delineation of ground water basin border, making legends of ground water basin, naming ground water basin, and geometry determination.

Letter c

Self-explanatory

Paragraph (3)

Self-explanatory

Article 10

Self-explanatory

Article 11

Paragraph (1) and Paragraph (2)

Self-explanatory

Paragraph (3)

Authority means:

- a. For inter-province or inter-state ground water basin: the authority of the Minister.
- b. For inter-regency/municipality ground water basin: the authority of the governor.
- c. For ground water basin in a regency/municipality: the authority of the regent / mayor.

Paragraph (4)

Self-explanatory

Article 12

Physical changes of ground water basin can be in the form of, among others, changes of borders of ground water basin and of government administration.

Article 13

Paragraph (1)

Ground water basin strategy is a conceptual thinking on scenario and steps to achieve or accelerate the achievement of objectives and targets stipulated in the management of ground water.

Paragraph (2) thru Paragraph (4)

Self-explanatory

Article 14 and Article 15

Self-explanatory

Article 16

Paragraph (1)

"Related river basin" is the place where-in the ground water basin exists.

Paragraph (2)

"Related river basin" is the place where-in the ground water basin exists.

Paragraph (3)

"Related river basin" is the place where-in the ground water basin exists.

Paragraph (4)

Self-explanatory

Article 17

Letter a

Self-explanatory

Letter b

Re-review of ground water management strategy can be performed in the event of, among others:

1. physical changes of ground water basin occur,
2. new data on ground water basin are found,
3. social economic changes occur.

Article 18

Paragraph (1)

Self-explanatory

Paragraph (2)

Ground water to be managed covers ground water in saturated zones, unsaturated zones, and underground rivers in limestone areas.

Paragraph (3)

Self-explanatory

Article 19 and Article 20

Self-explanatory

Article 21

Paragraph (1) thru Paragraph (3)

Self-explanatory

Paragraph (4)

Letter a

Ground water mapping has the purpose to obtain data on the availability, spread and productivity of aquifer, and condition of the existence of ground water presented in the form of a map.

Letter b

Ground water examination has the purpose to obtain data on the condition and environment of ground water, among others, the configuration and parameter of aquifer, spread of recharge area and water release area, quality and quantity of ground water, and/or impacts of water withdrawal.

Letter c

Ground water research has the purpose to obtain more detailed data from the examination of ground water.

Letter d

Ground water exploration has the purpose to obtain ground water data, among others, the spread and physical nature of rocks containing ground water, quality of ground water, well construction, optimum discharge, depth of aquifer, etc, through geophysical survey, drilling, well logging, pumping tests, and laboratory examination activities.

Letter e

Ground water evaluation has the purpose to know the spread, quality and quantity of ground water.

Paragraph (5)

Self-explanatory

Article 22

Paragraph (1)

Self-explanatory

Paragraph (2)

What is meant by "other parties" are agencies or institutions, both governmental and private, such as Indonesia Science Institute (LIPI = Lembaga Ilmu Pengetahuan Indonesia), universities or business entities having the competence in the aspect of ground water.

Assignment of other parties shall be made in accordance with provisions of legislations.

Article 23

Self-explanatory

Article 24

Paragraph (1) thru Paragraph (3)

Self-explanatory

Paragraph (4)

Letter a

"Ground water protection zone" is the area that must be protected as a protected zone due to its function on ground water is very important.

Letter b

"Ground water utilization zone" is the area where its ground water can be utilized as a cultivation zone.

Paragraph (5) and Paragraph (6)

Self-explanatory

Article 25 and Article 26

Self-explanatory

Article 27

Letter a

Self-explanatory

Letter b

Long term planning of ground water management is compiled for a period of 25 (twenty five) years at the most.

Medium term planning of ground water management is compiled for a period of 10 (ten) years at the most.

Short term planning of ground water management is compiled for a period of five (5) years at the most.

Letter c

Self-explanatory

Article 28

Paragraph (1) and Paragraph (2)

Self-explanatory

Paragraph (3)

What is meant by "other parties" are agencies or institutions, both governmental and private, such as Indonesia Science Institute (LIPI = Lembaga Ilmu Pengetahuan Indonesia), universities or business entities having the competence in the aspect of ground water.

Assignment of other parties shall be made in accordance with provisions of legislations.

Paragraph (4)

"Permit holders" are individuals, business entities, government agencies or social bodies possessing permits to use ground water or permits to exploit ground water.

Paragraph (5)

Self-explanatory

Article 29

Paragraph (1)

Procurement of means and infrastructures is performed by, among others drilling, digging, procurement of ground water monitoring devices.

Paragraph (2)

Self-explanatory

Article 30 and Article 31

Self-explanatory

Article 32

Paragraph (1)

Self-explanatory

Paragraph (2)

What is meant by "other parties" are agencies or institutions, both governmental and private, such as Indonesia Science Institute (LIPI = Lembaga Ilmu Pengetahuan Indonesia), universities or business entities having the competence in the aspect of ground water.

Assignment of other parties shall be made in accordance with provisions of legislations.

Paragraph (3)

Self-explanatory

Paragraph (4)

What is meant by "periodically according to necessities" is e.g. performed on the eve or middle of each year to know the development of preparation phase and of the performance phase of ground water management.

Paragraph (5)

Self-explanatory

Article 33 thru Article 35

Self-explanatory

Article 36

Paragraph (1) and Paragraph (2)

Self-explanatory

Paragraph (3)

Paragraph (3)

What is meant by "monitoring well" is a well equipped with monitoring devices functioning to record changes of the condition and evaluation of ground water.

Letter a

What is meant by "position of ground water surface" is the depth or height of ground water surface measured from ground surface.

Letter b and Letter c

Self-explanatory

Letter d

What is meant by "ground sinking" is a symptom of changes of ground water environment occurring due to a vacancy of ground water content in the aquifer confining layer which generally is in the form of clay layers.

Paragraph (4)

What is meant by "producing well" is a well functioning to withdraw ground water. For the purpose of ground water monitoring, it can also function as a monitoring well.

Paragraph (5) and Paragraph (6)

Self explanatory

Article 37

Self explanatory

Article 38

Paragraph (1)

Monitoring well net is a series of systematic location and depth of monitoring wells in a ground water basin.

Paragraph (2) and Paragraph (3)

Self explanatory

Article 39

Paragraph (1) and Paragraph (2)

Self-explanatory

Paragraph (3)

Letter a

Included as ground water recharge area are water spring recharge areas.

Letter b

Aquifer support capacity on various activities are among others: energy and mining and ground sub-surface civil constructions, shown from the result of analysis of environmental impact, both environmental management efforts (UKL = upaya pengelolaan lingkungan) and environmental monitoring efforts (UPL = upaya pemantauan lingkungan) as well as analysis of environmental impact (Amdal = Analisis Mengenai Dampak Lingkungan).

Letter c

Self-explanatory

Article 40

Paragraph (1)

Letter a

Ground water recharge can be secured, both naturally and artificially.

Letter b

Prohibition on drilling, digging or other activities within a radius of 200 (two hundred) meters from the location of the emergence of a spring is meant to secure the flow of ground water of the aquifer system supplying to or which can effect the emergence of the spring.

"Other activities" among others: rock mining,

Letter C.....

Letter c

Self-explanatory

Paragraph (2)

"Activities which can disturb an aquifer system" is among others, the construction of tunnels or rock mining.

Paragraph (3)

Self-explanatory

Article 41 thru Article 43

Self-explanatory

Article 44

Paragraph (1)

Letter a thru letter f

Self-explanatory

Letter g

Arrangement of the distance between ground water drilling or dug wells is based on the local hydro-geology condition.

Paragraph (2)

Letter a

Self-explanatory

Letter b

Degradation or decline of ground water condition is shown by a very fast decline of ground water surface, ground water contamination, intrusion of salt water, or ground sinking.

Letter c

Self-explanatory

Paragraph (3)

Self-explanatory

Article 45

Paragraph (1)

Self-explanatory

Paragraph (2)

Letter a and Letter b

Self-explanatory

Letter c

Restoration of the quality of contaminated ground water can be made by:

1. Isolation of contamination source;
2. draining the contaminated ground water; or
3. flushing contaminated ground water.

Paragraph (3)

What is meant by "provisions of legislations in the form of living environment" are Government Regulations on Management of Water Quality and Control of Contaminated Water.

Article 46

Ground water users are government agencies, individuals, social bodies, or business entities using ground water both with permit and those not requiring any permit.

The closing of a drilled well or dug well where the quality of the water there-of had been contaminated can be performed, among others with poured concrete. This activity is executed to prevent the expansion of contamination to the direction of ground water.

Article 47

Self-explanatory

Article 48

Paragraph (1)

Self-explanatory

Paragraph (2)

Letter a

"Aquifer characteristics" covers, among others the porosity, yield, and continuity of water.

Letter b

"Hydro-geology condition" covers, among others the aquifer system, and ground water flow pattern.

Letter c

"Ground water condition and environment" are, among others the quality, quantity, rock layers containing ground water.

Letter d

"Ground Water Protection Zone" among others are Ground water recharge areas, critical zones and damaged zones.

Letter e thru Letter g

Self-explanatory

Paragraph (3) thru Paragraph (7)

Self-explanatory

Article 49

Self-explanatory

Article 50

Paragraph (1)

Self-explanatory

Paragraph (2)

Letter a

"Daily basic needs" cover drinking water, cooking, bathing, religious requirements, washing, rest rooms.

Letter b

"Peasant farming" is farming cultivation covering various commodities, i.e. food plants, horticulture, fisheries, husbandry, estate and peasant-managed forestry

with a certain area where-in water requirement is not more than two (2) liters per second per family.

Food plant farming are plants not requiring ground water in large volume, among others, are secondary crops and corn.

Letter c thru Letter e

Self-explanatory

Letter f

The supply of ground water for tourism, among others, is in the form of the utilization of underground rivers or the use of ground water for hotels and restaurants.

Paragraph (3)

In accordance with Law No. 7 Year 2004 on Water Resources, the supply of water to meet daily basic needs and irrigation needs for peasant farming within the existing irrigation system is the main priority of the provisions of water resources above all requirements. However, for areas where water is very scarce, the provision of water is prioritized to meet daily basic needs..

Paragraph (4) and Paragraph (5)

Self-explanatory.

Article 51

Self-explanatory

Article 52

Paragraph (1) thru Paragraph (3)

Paragraph (4)

"Deep aquifers" are aquifers which in general are pressurized in nature.

Paragraph (5)

Letter a and Letter b

Self-explanatory

Letter c

"Allocation of ground water use" is the amount and period of ground water withdrawal and exploitation.

Letter d

Self-explanatory

Paragraph (6)

Self-explanatory

Article 53

Paragraph (1)

Ground water drilling or digging is aimed to extract ground water from aquifers thru drilled wells, dug wells, or other methods.

Paragraph (2)

Types and physical nature of rocks are, among others porous limestone, having a potential water-losing nature, loose sand of an easily collapsing nature, clay having an easily floating nature.

Hydro-geological condition presented in maps of ground water conservation zones and ground water utilization zones cover, among others the spread and characteristics of aquifer, ground water flow pattern, ground water potentials, and position of ground water surface.

Paragraph (3) and Paragraph (4)

Self-explanatory

Article 54

Paragraph (1)

Included in non-business activities, among others cover activities of religious schools, religious places, government offices.

Paragraph (2)

What is meant by surface water as insufficient is in the aspect of quantity.

Paragraph (3)

Self-explanatory

Paragraph (4)

Included in ground water use permit, among others cover the provision and allotment of ground water thru drilling or digging activities, withdrawal, and usage.

Permit for the use of ground water is required considering that:

- a. the method of ground water drilling, or digging or its usage changes the condition and environment of ground water, among others in the form of decrease of ground water supply, shrinkage of ground water surface, changes of ground water flow pattern, decrease of ground water quality, disturbances on aquifer system; or
- b. the use there-of is to meet needs requiring ground water in a large volume exceeding provisions.

Paragraph (5)

"Social bodies" among others are foundations, religious places, and schools.

Article 55

Self-explanatory

Article 56

Paragraph (1) thru Paragraph (5)

Self-explanatory

Paragraph (6)

Letter a thru letter c

Self-explanatory

Letter d

During the construction of utilities for the utilization of ground water, if the quality of ground water did not quite meet requirements, it shall be completed with water processing installations.

Paragraph (7)

Self-explanatory

Article 57

Paragraph (1)

Letter a

"Production raw material" among others are drinking water in containers, clean water, food, drinks, and drugs.

Letter b and Letter c

Self-explanatory

Letter d

"Aid material or production process" among others are water for engine cooling, dying process in textile industries, sanitation in activities of industries, mining, tourism.

Paragraph (2)

Self-explanatory

Paragraph (3)

Letter a

"Certain location" is the location in accordance with a permit.

Letter b and letter c

Self-explanatory

Paragraph (4)

Letter a thru letter d

Self-explanatory

Letter e

"Provisions of legislations" among others are regulations related with provisions on disturbances (HO).

Article 58

Paragraph (1)

Self-explanatory

Paragraph (2)

Included in a permit for ground water exploitation, among others are provisions and allotment thru activities of drilling or digging, withdrawal, and exploitation of ground water.

Paragraph (3)

Self-explanatory

Article 59

"Accompanying water" is ground water emerging by itself in exploration and exploitation activities of mining and energy.

"De-watering" is a process of the decrease of ground water surface in certain activities, such as the exploitation of coal-bed methane.

In the initial phase of coal-bed methane exploitation, it is necessary to perform de-watering activities on coal layers beneath the ground surface to make the coal layers to be permeable to allow the flow of methane gas. The coal layer cannot be released from de-watering activities that is very decisive on the volume of produced coal methane.

The use and utilization of accompanying water and/or de-watering for activities related directly with the exploration and exploitation of mining, natural oil and gas, and geo-thermal do not require any permit.

Article 60

Self-explanatory

Article 61

Paragraph (1)

"Ground water destructive power control" is the control of ground water destructive power in ground water basin as meant in Article 58 of Law No. 7 year 2004 on Water Resources.

"Salt water intrusion" (salt water encroachment) is the infiltration of salt water, either in the form of saline ground water or sea water on ground fresh water in an aquifer system.

Paragraph (2)

The sinking of ground water surface causes an unbalanced hydro-geology condition, if it occurs continuously it can cause the intrusion of salt water and/or ground sinking.

Paragraph (3)

Self-explanatory

Article 62

Paragraph (1) and Paragraph (2)

Self-explanatory

Paragraph (3)

"Artificial recharge" is an absorption performed to increase the filling-in capacity of ground water into a ground water basin thru, among others, absorption wells, absorption ditches, and/or absorption pools.

Article 63 and Article 64

Self-explanatory

Article 65

"A situation hazardous to the environment" is a situation causing environmental damage e.g. outpouring of mud, gas, hazardous substance from the ground or damaging public facilities.

"Emergency actions" among others are stopping a drilling or digging that can cause a situation hazardous to the environment.

Article 66

Self-explanatory

Article 67

Paragraph (1)

Every permit on the use or exploitation of ground water shall be issued for only one producing well point.

Paragraph (2) and Paragraph (3)

Self-explanatory

Article 68

Paragraph (1)

Letter a

Technical recommendation for the issuance of permit for the use or exploitation of ground water contains among others: location and depth of ground water drilling or digging, type and depth of tapped aquifer, discharge of ground water withdrawal, ground water quality, and allotment of ground water use.

Letter b and Letter c

Self-explanatory

Paragraph (2) thru Paragraph (4)

Self-explanatory

Article 69

Self-explanatory

Article 70

Paragraph (1)

Ground water withdrawal is categorized as a large volume if the ground water withdrawal or use exceeds two (2) liters per second.

Paragraph (2)

Self-explanatory

Article 71 thru 73

Self-explanatory

Article 74

Paragraph (1)

Evaluation shall be performed to know changes of the availability of ground water in a ground water basin.

Paragraph (2)

Self-explanatory

Article 75

Paragraph (1) and Paragraph (2)

Self-explanatory

Paragraph (3)

Letter a

Well logging will show the type, physical nature, and depth of rocks containing ground water to enable the determination of the type and position of filters.

Letter b

Result of physical and chemical analysis will show the quality of ground water.

Letter c

Result of pumping test analysis will show the discharge of ground water that can be withdrawn at an optimum from the well.

Letter d

Well construction drawing will indicate the position of filters and gravel packs.

Article 76

Self-explanatory

Article 77

Letter a thru d

Self-explanatory

Letter e

"Participation" means, among others obligations of permit holders to provide places for the construction of monitoring wells within its location area.

Letter f

"Costs for ground water management services" means, among others costs for the management of ground water in the ground water basin as meant in Article 26 Paragraph (7) of Law No. 7 Year 2004 on Water Resources.

Letter g

Self-explanatory

Article 78

Paragraph (1)

"At least 10% (ten percent)" is the minimum limit to be provided to the local populace determined by a permit holder.

"Local populace" is the local community in a ground water exploitation location.

Paragraph (2)

Self-explanatory

Article 79

Paragraph (1)

Letter a

Self-explanatory

Letter b

Permit shall be returned if ground water is not used any more.

Letter c

Permit shall be revoked if provisions stipulated in the permit are not complied with, and did not fulfill provisions of legislations as well as unable to improve its performance in accordance with the allocated time limit after a written warning was issued by, and temporary cessation of all activities from the permit granter.

Paragraph (2)

Self-explanatory

Article 80

Paragraph (1)

Self-explanatory

Paragraph (2)

Ground water information covers hydro-geological information as part of water resources information.

Paragraph (3)

Self-explanatory

Article 81 and Article 82

Self-explanatory

Article 83

Paragraph (1)

"Factual needs" is the fund required solely to fund the management of ground water so that the performance there-of can be proper to ensure the continuity of ground water functions.

Paragraph (2)

Every type of such cost covers three aspects of ground water management, i.e. ground water conservation, ground water empowerment, and control of ground water destructive power.

Paragraph (3) thru Paragraph (7)

Self-explanatory

Article 84

Paragraph (1)

Letter a and Letter b

Self-explanatory

Letter c

"Income of ground water management services costs" is the income on the yield of water resources management services costs from the ground water basin referred to in Article 77 of Law No. 7 Year 2004 on Water Resources.

Paragraph (2) thru Paragraph (7)

Self-explanatory

Article 85

"Urgent interest" is an interest requiring quick handling, and constituting a joint problem between the Government and the regional government.

Form of cooperation, among others is in the form of cost sharing or other forms in accordance with the condition of an urgent interest.

Article 86

Paragraph (1)

"Stake holders" are among others the management apparatus of ground water management, holders of right of use and holders of right of water exploitation from the utilization of ground water, association of professionals, association of ground water drilling companies, and public groups.

Paragraph (2) thru Paragraph (4)

Self-explanatory

Article 87

Paragraph (1)

Self-explanatory

Paragraph (2)

Report on the performance of control on the use of ground water contains, among others number and location of drilled wells, number of ground water users, amount of ground water withdrawal, allotment of ground water use, and amount of tax of ground water utilization.

Paragraph (3)

Self-explanatory

Article 88

Paragraph (1)

Self-explanatory

Paragraph (2)

Participation of the community in the control of ground water management can be performed by submitting reports and/or claims

Article 89

Paragraph (1)

Self-explanatory

Article 90

Paragraph (1)

Self-explanatory

Paragraph (2)

Letter a

Control on the performance of ground water drilling and/or digging, ground water use and/or exploitation, among others cover:

1. location and depth of ground water drilling or digging;
2. installment of well construction;
3. performance of ground water pumping test;
4. analysis of ground water quality;
5. amount of ground water withdrawal;
6. allotment of ground water utilization;
7. obligations to build absorption wells; and
8. tax on ground water utilization.

Letter b and Letter c

Self-explanatory

Article 91 thru Article 97

Self-explanatory

SUPPLEMENT TO STATUTE BOOK OF
THE REPUBLIC OF INDONESIA NO. 4859

====(D)====