

UTILIZATION GUIDELINES OF WATER RESOURCES

(The Regulation of Minister of Public Works Number 06/PRT/M/2011, 28 March 2011)

BY THE GRACE OF ONE AND ALMIGHTY GOD
THE MINISTER OF PUBLIC WORKS
REPUBLIC OF INDONESIA,

Considering:

That to implement the regulation in Article 62 paragraph (3) and Article 73 paragraph (4) of Government Regulation of Republic of Indonesia Number 42 Year 2008 concerning Water Resources Management, it is necessary to stipulate Regulation of Minister of Public Works Utilization Guidelines of Water Resources;

In view of:

1. Government Regulation of Republic of Indonesia Number 6 Year 2006 (BN No. 7360 page 11B-14B and so on) concerning State/Regional Property Management (State Gazette of Republic of Indonesia Year 2006 Number 20, Supplementary State Gazette of Republic of Indonesia Number 4609);
2. Government Regulation of Republic of Indonesia Number 38 Year 2008 (BN No. 7671 page 6B-10B) concerning Amendment Upon Government Regulation Number 6 Year 2006 concerning State/Regional Property Management (State Gazette of Republic of Indonesia Year 2007 Number 82);
3. Government Regulation of Republic of Indonesia Number 42 Year 2008 (BN No. 7720 page 21B-24B and so on) Water Resources Management (State Gazette of Republic of Indonesia Year 2008 Number 82, Supplementary State Gazette of Republic of Indonesia Number 4858);
4. President Regulation of Republic of Indonesia Number 47 Year 2009 concerning Formation and organization of State Ministry;
5. President Regulation of Republic of Indonesia Number 24 Year 2010 concerning Positions, Duties, and Functions of State Ministry As Well As the Order of Organization, Duties, and Functions of Echelon I of State Ministry;
6. Decree of President of Republic of Indonesia Number 84/P Year 2009;
7. Regulation of Minister of Public Works Number 21/PRT/M/2006 (BN No. 7445 page 8B-12B) concerning National Policy and Strategy for Waste Management System Development;
8. Regulation of Minister of Public Works Number 22/PRT/M2006 concerning Pacification and Reinforcement of Rights to Land of Ministry of Public Works;

9. Regulation of Minister of Domestic Affairs Number 17 Year 2007 concerning Technical Guidelines for Regional Property Management;
10. Regulation of Minister of Finance Number 96/PMK.06/2007 (BN No 7580 page 2B-4B) concerning Implementation Procedures for Usage, Utilization, Abolition and Transfer of Ownership of State Property;
11. Regulation of Minister of Public Works Number 16/PRT/M2008 concerning National Policy and Strategy of Settlement Wastewater Treatment System Development;
12. Regulation of State Minister of Environment Number 12 Year 2009 concerning Rainwater Utilization;
13. Regulation of Minister of Public Works Number 08/PRT/M/2010 concerning Organization and Procedures of Ministry of Public Works;
14. Keputusan Menteri Kelautan dan Perikanan Republik Indonesia Nomor Kep 02/Men/2007 tentang Cara Budidaya Ikan Yang Baik;

DECIDES :

To stipulate :

REGULATION OF MINISTER OF PUBLIC WORKS
CONCERNING USAGE GUIDELINES FOR WATER RESOURCES.

CHAPTER I GENERAL PROVISIONS

Article 1

In this minister regulation there are definitions as follows:

1. Water resources are water, water sources, and water power it bears.
2. Surface water is all the water on ground surface.
3. Source of surface water is natural place or container of water and/or artificial at or on ground surface.
4. Water power is potential contained in the water and/or water source that can give benefits as well as loss for human life and livelihood as well as their environment.
5. The usage of water resources is utilization of water resources and its facilities as media and/or materials.
6. Water pollution is inserting it with or inserted it into living things, substance, energy, and or other components by human activities that exceeds decided water quality standard up to certain level that cause the water not to be able to function as its designation.
7. Wastewater is reminder of an effort and/or activities in liquid form.
8. Domestic wastewater is wastewater comes from water usage for non-industrial daily life.
9. Wastewater recycling is effort to process wastewater from households, user group in huge amount, hotels, hospitals, industries, and other usage of water so that can be reused according to needs.

10. Repeated water usage is used water utilization for other activities.
11. User is individual, water user society group, social agency, business actors, or business entity that use water resources in the form of usage of water resources and its facilities as medium, usage of water and water power as material, usage of water as media, or usage of water, water sources, and/or water power as medium and material.
12. Water resources management is institution granted with authority to implement the management of water resources.
13. Institution granted with authority to implement water resources management is technical implementation unit of water resources management in central and regional level, State-Owned Enterprises (BUMN) and Region-Owned Enterprises (BUMD) in the field of water resources management.
14. Water resources management is effort in planning, implementing, monitoring, and evaluating the organization of water resources conservation, water resources utilization, and destructive water control.
15. Raw water is water taken from surface water source to suffice many needs.
16. Drinking water supply system, next mentioned as SPAM (system penyediaan air minum), is a physical system unit (technique) and nonphysical of drinking water infrastructure and facilities.
17. Office (Dinas) is governmental organization in provincial or municipal/regency level that has scope of particular duties and responsibilities in the field of water resources.
18. Regional government is governor, regent/mayor, and regional apparatus as elements of regional government organization.
19. Central government, next mentioned as Government, is the President of Republic of Indonesia who holds administration power of the Unitary State of Republic of Indonesia (NKRI) as intended in the 1945 Constitution of Republic of Indonesia.
20. Minister is the Minister of Public Works.
21. Related instances with water resources usage are government ministerial and non-ministerial institutions related to water resources usage that involves water resources usage for sports, tourism, agriculture, fisheries, industry, water transportation, and environment.

Article 2

Water resources and its infrastructure usage is done base on the principles of:

- a. usage saving;
- b. order and justice;
- c. correct usage;
- d. usage sustainability; and
- e. usage that support each other between surface water and ground water by prioritizing the usage of surface water.

Article 3

- (1) This minister regulation is intended as reference for water resources usage for:
 - a. water resources administrator in central, provincial, regency/municipality, and village level;
 - b. institutions with duties for research and development related to water resources.
 - c. educational institutions; and
 - d. other water resources users.
- (2) This minister regulation is intended to provide direction in:
 - a. water resources usage;
 - b. technology development for water resources usage;
 - c. arrangement of licensing technical recommendation for water resources usage; and
 - d. arrangement of regional regulation to materialize five usage principles as meant in Article 2.
- (3) The scope of this minister regulation includes surface water resources usage in the form of:
 - a. water resources and the infrastructure usage as media;
 - b. water and water power usage as material;
 - a. water sources usage as media;
 - d. water, water sources, and/or water power usage as media and materials; and
 - e. water resources usage in the state of emergency and immediate needs.

CHAPTER II

WATER RESOURCES AND ITS INFRASTRUCTURE AS MEDIA

First Part

General

Article 4

- (1) Water resources and its infrastructure usage as media as meant in Article 3 paragraph (3) point a is intended to utilize water, water source, and water power as one unit along with its infrastructure without reducing water amount at its source.
- (2) Water resources and its infrastructure usage as media as meant at paragraph (1) can be in the form of usage for powerhouse, transportation, sports, tourism, and aquaculture at the water source.
- (3) Water resources and its infrastructure usage as media as meant at paragraph (1) is implemented by observing the principles of usage saving, order and justice, correct usage, as well as sustainability of water resources usage.
- (4) Government, regional government, and water resources administrators carry out early education, training, and community assistance for the implementation of water resources and its infrastructure usage as media as meant at paragraph (1) and paragraph (3).
- (5) Government, regional government, water resources administrators, and business actors are obliged to socialize and/or to campaign to public for the implementation of:

- a. water resources and its infrastructure usage as media; and
- b. technology for water resources usage, including technology for good Aquaculture (Cara Budi Daya Ikan/CBIB) to society.

- (6) CBIB as meant at paragraph (5) point b is the way to keep and/or to raise fish and to harvest the result in controlled environment that it will provide guarantee for food security from cultivation by observing sanitation, feed, fish medication, chemicals, and biological materials, as well as environmental carrying capacity.
- (7) Socialization and/or campaign for water resources and its infrastructure usage as media as meant at paragraph (5) is done through counseling, print media, and/or electronic media.

Second Part

Usage Saving

Article 5

Saving of water resources and its infrastructure usage as media as meant in Article 4 paragraph (3) is materialized in the usage that in accordance to minimum needs.

Third Part

Order and Justice

Article 6

- (1) Order and justice in water resources and its infrastructure usage as media as meant at Article 4 paragraph (3) is materialized by:

- a. water resources administrator through:

1. arrangement of water resources utilization zone;
2. installation of information and/or prohibition board;
3. access provision for water user to fulfill daily basic necessities;
4. access allocation for the society to use or to enjoy water sources as public space in accordance to decided zone;
5. Prevention of licensing duplication;
6. requirements demand of licensing technical recommendation consistently; and
7. suggestion submit of reconsideration upon license that is not implemented in accordance to the provisions stated on the license.

- b. users through:

1. compliance towards the provisions of water resources zone utilization;
 2. access provision for water user to fulfill daily basic necessities; and
 3. access provision for the society to use and/or to enjoy water sources as public space.
- (2) decision on water resources zone utilization as meant at paragraph (1) point a.1. is done by Minister, governor, regent/mayor in accordance to their respective authority and responsibility.
- (3) Arrangement of water resources zone utilization as meant at paragraph (1) point a.1. can be in the

form of arrangement of reservoir utilization zone described on example 3.1. of Attachment as inseparable part of this minister regulation.

- (4) Information and/or prohibition board as meant at paragraph (1) point a.2. can consist of:
- a. information of reservoir utilization zone, can be in the form of danger zone, sanctuary zone, tourism zone, and enterprise zone; and
 - b. direction to garbage dump site.
- (5) Access provision for society to use and/or to enjoy water sources as public space as meant at paragraph (1) point b.3. can be implemented by business actors described at example 3.2. of the Attachment as inseparable part of this minister regulation.
- (6) Prevention upon licensing duplication as meant at paragraph (1) point a.5 is done by doing orderly administration upon licenses issued.

Fourth Part

Correct Usage

Article 7

- (1) Correct usage in water resources and its infrastructure usage as media as meant at Article 4 paragraph (3) is materialized by:
- a. water resources administrator through:
 1. technical recommendation provision in accordance to decided water resources utilization; and
 2. monitoring of usage implementation in accordance to procedures decided by institu-

tions related to water resources usage.

b. users with:

1. utilization in accordance to decided water resources zone utilization; and
 2. usage in accordance to procedures decided by institutions related to water resources usage.
- (2) Utilization according to decided water resources zone utilization as meant at paragraph (1) point b.1. can be illustrated on example 4.1. of Attachment as one unit and inseparable part of this minister regulation.
- (3) Implementation of water resources and its infrastructure usage as media accordingly to decided procedures by institutions related to water resources usage as meant at paragraph (1) point a.2. and b.2. can be in the form of CBIB.

Fifth Part

Usage Sustainability

Article 8

- Usage sustainability of water resources and its infrastructure usage as media as meant in Article 4 paragraph (3) is materialized by the water resources administrator and water resources users through:
- a. continuity of sustainable water resources environment quality;
 - b. prevention of water pollution caused by transportation, as the result of production process done by fish cultivators, and/or as the effect of domestic waste;

- c. prevention of water sources and its infrastructures damage from transportation; and
- d. maintenance of water source and its infrastructures.

Paragraph 1

Continuity of Sustainable Water Resources

Environment Quality

Article 9

- (1) The continuity of sustainable water resources environment quality by water resources administrator as meant in Article 8 point a is achieved through:
 - a. provision of garbage bin according to garbage type at specific place;
 - b. imposition of liability on business actors to provide garbage bin accordingly to the garbage type;
 - c. garbage management with principle of reduce, reuse, recycle (3R) accordingly to the laws and regulations; and
 - d. sanction imposition accordingly to the laws and regulations.
- (2) Collected garbage, as meant at paragraph (1) point a, can be processed by the collector or other parties.

Article 10

- (1) The continuity of sustainable water resources environment quality by user as meant in Article 8 point a is achieved through:

- a. reuse of produced garbage for other needs;
- b. reduce of produced garbage as effect of water resources and its infrastructure usage as media;
- c. recycle of garbage using environmental friendly methods; and
- d. provision of garbage bin according to garbage type.

- (2) The continuity of sustainable water resource environment quality by user by providing garbage bin accordingly to garbage type as meant at paragraph (1) point d as described at example 5.1. of Attachment as one unit and inseparable part of this minister regulation.

Paragraph 2

Water Pollution Prevention

Article 11

- (1) Prevention of water pollution as the effect of transportation as meant in Article 8 point b is done by technical institution responsible in the field of traffic, river transportation, lake transportation, and crossing as well as coordination with water resources administrator using methods as follows:
 - a. checking operational method of transportation means, so that there will be no negative impact in the form of water pollution as effect of turbulence that disturbs basic material stability; and

b. checking lubricant oil/oil fuel (BBM) leak in transportation means.

(2) In case of leak checking as meant at paragraph (1) point b the result shows leak of lubricant oil/BBM at transportation means, these followings can be done:

- a. repair order of transportation mean to stop the leak of lubricant oil/BBM; and
- b. prohibition on operation of transportation mean which the leak of lubricant oil/BBM cannot be stopped.

(3) Prevention of water pollution as effect of production done by the fish cultivators carried out by water resources administrator as meant in Article 8 point b is done through socialization of CBIB and socialization of permitted utilization zone.

(4) Prevention of water pollution as effect of domestic waste by water resources administrator as meant in Article 8 point b is done by carrying out monitoring and evaluation upon water quality to location of water and water power usage for material as well as to location of water source.

(5) Technical rules concerning the implementation of transportation means operational methods meant at paragraph (1) point a follow norms, standards, guidelines, and criteria in the field of traffic, transportation of river, lake, and crossing.

Article 12

(1) Prevention of water pollution as effect of trans-

portation by users as meant in Article 8 point b is done through:

- a. checking and not to operate the transportation mean that leaks the lubricant oil/BBM; and
- b. providing garbage bin according to garbage type.

(2) Prevention of water pollution as effect of production done by the fish cultivators as meant in Article 8 point b is done through implementation of CBIB, paying attention to environmental carrying capacity from time to time and water flow direction as well as in the permitted zone.

(3) Prevention of water pollution as effect of domestic wastes by users as meant in Article 8 point b is can be in the form of:

- a. obligation to process domestic waste water until fulfilling the quality standards decided before dumped to water source for user group of huge amount; and
- b. obligation to provide septic tank as infrastructure completeness of tourism and sports.

Paragraph 3

Prevention of Water Source and Its Infrastructure Damage as a Consequence of Transportation

Article 13

Prevention of water source and its infrastructure damage as effect of transportation by water resources administrator as meant in Article 8 point c is done through:

- a. periodic investigation to carry out monitoring and evaluation; and
- b. provision of technical recommendation of speed setting on transportation means and amount of tonnage of transportation means.

Article 14

Prevention of water source and its infrastructure damage as effect of transportation by users as meant in Article 8 point c is done by obeying the regulation for speed and amount of tonnage of transportation.

Paragraph 4

Maintenance of Water Source and Its Infrastructures

Article 15

Maintenance of water source and its infrastructure by water resources administrator as meant in Article 8 point d is done by implementing operation and maintenance based on decided operation and maintenance manual.

Article 16

Maintenance of water source and its infrastructure by users as meant in Article 8 point d is done by implementing repair upon damage on water source and its infrastructures caused by the user of water source and its infrastructures as media.

CHAPTER III

WATER AND

WATER POWER USAGE AS MATERIAL

First Part

General

Article 17

- (1) Usage of water and water power as material as meant in Article 3 paragraph (3) point b is done by taking some amount of water from water source in order to fulfill raw water needs.
- (2) Raw water needs as meant at paragraph (1) is earmarked to fulfill drinking water needs of households and other water needs for households, irrigation, routine flushing, drinking water provision business, industrial business, accommodation business, or other business activities.
- (3) Water and water power usage as material as meant at paragraph (1) is implemented by observing the principles of usage saving, order and justice, correct usage, sustainability usage, as well as mutual support usage between surface water and ground water by prioritizing surface water usage.
- (4) Government, regional government, and water resources administrators carry out early education, training, and community assistance for the implementation of water and its water power usage as material as meant at paragraph (1) and at paragraph (3).
- (5) Government, regional government, water resources administrators, and business actors are

obliged to socialize and/or to campaign to public for the implementation of:

- a. water and water power usage as material as meant at paragraph (3); and
 - b. technology for water resources usage, including water saving technology, wastewater processing technology, and environmental friendly agriculture technology.
- (6) Socialization and/or campaign for water and its water power usage as material as meant at paragraph (5) is done through counseling, print media, and/or electronic media.
- (7) Campaign contents through print media as meant at paragraph (6) by using brochure and/or leaflet by water resources administrator can be described at example 1.1. Attachment as one unit and inseparable part of this minister regulation.
- (8) Campaign contents through print media as meant at paragraph (6) by using brochure and/or leaflet by business actors can contain invitation as described at example 1.2. Attachment as one unit and inseparable part of this minister regulation.
- (9) Campaign contents through counseling as meant at paragraph (6) by water resources administrator can contain module as described at example 1.3. Attachment as one unit and inseparable part of this minister regulation.
- (10) Campaign contents through print media as meant at paragraph (6) by using brochure and/or leaflet by business actors can contain guidelines as de-

scribed at example 1.4. Attachment as one unit and inseparable part of this minister regulation.

Second Part

Usage Saving

Article 18

- (1) Usage saving of water and water power as material as meant in Article 17 paragraph (3) is materialized in the usage that in accordance to minimum needs and by observing water availability.
- (2) Usage saving of water and water power as material as meant at paragraph (1) is materialized by:
 - a. educational institutions, instances that have duties of research and development of water resources, and institutions that have duties of research and development of settlement water resources by carrying out water saving technology development;
 - b. water resources administrator through:
 1. conservation of excess water,
 2. prevention of water retrieval that is not in accordance to rights to use of water,
 3. decision on water quota for user of huge amount of water; and
 4. improvement of operational efficiency.
 - c. users through:
 1. conservation of excess water,
 2. improvement of operational efficiency; and
 3. compliance toward stipulated regulation and implementation of water saving

technology for water usage by industry, business activities, social, or institutions.

Paragraph 1

Water Saving Technology Development

Article 19

(1) Water saving technology development as meant at Article 18 paragraph (2) point a, is materialized by:

- a. carrying out research to obtain technology that can reduce volume unit of water usage needs;
- b. developing combination of water supply network from piping network SPAM and non-piping network SPAM;
- c. developing water saving irrigation technology in paddy as well as non-paddy cultivation;
- d. developing cultivation fishery technology with water saving fish commodity; and
- e. developing water saving plumbing system.

(2) Development of water supply network combination from piping network SPAM and non-piping network SPAM as meant at paragraph (1) point b can be in the form of network as shown on Generic Model Design Scheme of Rainwater Utilization (Skema Desain Model Generik Pemanfaatan Air Hujan) as described on example 2.1.1. of Attachment as one unit and inseparable part of this minister regulation.

(3) Development of water saving irrigation technology as meant at paragraph (1) point c can be in

the form of System of Rice Intensification (SRI) described on example 2.1.2. of Attachment as one unit and inseparable part of this minister regulation.

(4) Development of water saving plumbing system as meant at paragraph (1) point d can be illustrated on example 2.1.3. of Attachment as one unit and inseparable part of this minister regulation.

Paragraph 2

Conservation of Excess Water

Article 20

(1) Conservation of water excess by water resources administrators as meant in Article 18 paragraph (2) point b.1. is materialized by conserving excess water during rain to be utilized in the time of need by making Rainwater Container (PAH), whether it is on the top of a building, on the surface or in the ground, pool, reservoir as well as dam.

(2) PAH on the ground surface, as meant at paragraph (1), can be in the form of field scale PAH as illustrated on example 2.2.1. of Attachment as one unit and inseparable part of this minister regulation.

(3) Pool, as meant at paragraph (1), can be in the form of trench dam or long storage as illustrated on example 2.2.2. of Attachment as one unit and inseparable part of this minister regulation.

(4) Reservoir, as meant at paragraph (1), can be illustrated on example 2.2.3. of Attachment as one

unit and inseparable part of this minister regulation.

Article 21

- (1) Excess water conservation by users, as meant in Article 18 paragraph (2) point c.1. is materialized by saving excess water during rain to be utilized in the time of need:
 - a. for the level of individual or household or some of household groups, they can build rainwater container, whether it is on the roof of the building, on the surface or in the ground, can be in the form of PAH, or artificial aquifer and rainwater storage (ABSAH); and
 - b. for users of huge amount of water and water usage by industry, business activities, social, and institution, it is obliged to make rainwater container, whether it is on the top of the roof, on the surface or in the ground, can be in the form of PAH, or ABSAH.
- (2) PAH construction by individual or household scale as meant at paragraph (1) point a can be illustrated on example 2.3.1 of Attachment as one unit and inseparable part of this Minister Regulation.
- (3) PAH construction by users of huge amount of water as meant at paragraph (1) point b can be illustrated on example 2.3.2. of Attachment as one unit and inseparable part of this minister regulation.
- (4) PAH construction by some household groups as

meant at paragraph (1) point a can be illustrated on example 2.3.3. of Attachment as one unit and inseparable part of this minister regulation.

- (5) PAH construction by users of industry as meant at paragraph (1) point b can be illustrated on example 2.3.4. of Attachment as one unit and inseparable part of this minister regulation.
- (6) ABSAH construction as meant at paragraph (1) point a can be illustrated on example 2.3.5. of Attachment as one unit and inseparable part of this minister regulation.

Paragraph 3

Prevention of Water Retrieval

That Against The Rights to Use of Water

Article 22

Prevention of water retrieval that against the rights to use of water by water resources administrator as meant in Article 18 paragraph (2) point b.2. is materialized by:

- a. formation of joint team of water users for water distribution security;
- b. dialogue among users;
- c. formulation of service procedure of water distribution;
- d. carrying out periodic inspection in the time of water distribution; and
- e. enforcing order.

Paragraph 4

Water Quota Settlement for User of

Huge Amount of Water

Article 23

Water quota settlement for users of huge amount of water by water resources administrator as meant in Article 18 paragraph (2) point b.3. is done by the minister/office of water resources administrator of province/district/city related to water resources usage in accordance to their respective authority and responsibility.

Paragraph 5

Operational Efficiency Improvement

Article 24

Operational efficiency improvement by water resources administrator as meant in Article 18 paragraph (2) point b.4. is done by reducing water loss and water channel leaks by:

- a. carrying out routine inspection;
- b. coaching users to be able to fix the leak; and
- c. carrying out routine maintenance in preserving condition of distribution channels to avoid leaks.

Article 25

Operational efficiency improvement by users as meant in Article 18 paragraph (2) point c.2. is materialized with:

- a. utilization of rainwater efficiently and effectively;
- b. minimizing water loss in untreated water transmission channel and in its distribution network;
- c. minimizing water loss in irrigation network and reclamation network of lowlands, swamp, and tidal swamp;

- d. usage of efficient tools;
- e. usage of bath tube with size according to minimum needs;
- f. monitoring and evaluation on water loss; and
- g. Users of huge amount of water can join together in an institution, can be in the form of fish cultivators or farmer institution to implement management of irrigation network and reclamation network of lowland swamp in the tertiary service/square area.

Paragraph 6

Compliance toward Stipulated Regulation and Implementation of Water Saving Technology

Article 26

Compliance toward stipulated regulation and implementation of water saving technology for water usage by industry, business activities, social, and institutions as meant in Article 18 paragraph (2) point c.3. is materialized by:

- a. not exceeding regulation in volume unit water usage needs decided by related institutions;
- b. applying water saving technology by:
 1. using lever model faucet/valve, not screw/rotation;
 2. using water saving toilet unit (amount of water used for urination flushing is less than defecate flushing);
 3. using tools like faucet, shower, and automatic toilet flushing that will stop when not in use;

4. using water accordingly to plants growth needs; and
5. using water saving tools for plants watering that can be in the form of sprinkler irrigation, and/or drip irrigation.

Third Part

Order and Justice

Article 27

(1) Order and justice in usage of water and water power as material as meant at Article 17 paragraph (3) is materialized by:

a. water resources administrator through:

1. arrangement of periodic water balance;
2. arrangement of water usage priority;
3. monitoring of water allocation;
4. settlement of pattern and manual of river and dam operation;
5. installation of information and/or prohibition board;
6. access provision for water user to fulfill daily basic necessities;
7. access allocation for the society to use and/or to enjoy water sources as public space in accordance to decided zone;
8. prevention of licensing duplication;
9. requirements demand of licensing technical recommendation consistently; and
10. submitting suggestion on reconsideration upon license that is not implemented in

accordance to the provisions stated on the license.

b. users through:

1. access provision for water user to fulfill daily basic necessities; and
2. access provision for the society to use and/or to enjoy water sources as public space.

(2) Water balance as meant at paragraph (1) point a.1. is done by Government or regional government in accordance to their respective authority and responsibility.

(3) Information and/or prohibition board as meant at paragraph (1) point a.5. may consist of:

- a. information about users obligation to obey the law in the licensing;
- b. information about access way to water source for society; and
- c. information about operation pattern of river and dam.

(4) Prevention upon licensing duplication as meant at paragraph (1) point a.8. is done by doing orderly administration upon licenses issued.

Fourth Part

Correct Usage

Article 28

Correct usage of water and water power as material as meant in Article 17 paragraph (3) is materialized by:

a. water resources administrator through:

1. implementation of water distribution accordingly to decided allocation;
 2. implementation of irrigation water distribution accordingly to planting pattern and agreement in the group of water users and/or institutions of water user farmers association,
 3. implementation of punctual, efficient, and effective water distribution accordingly to dam operation pattern and guidelines; and
 4. implementation of monitoring and evaluation on usage accordingly to decided quality (water allocation group class) in the retrieval place.
- b. users with:
1. implementation of water retrieval and usage accordingly to decided allocation and usage;
 2. implementation of irrigation water retrieval accordingly to planting pattern and agreement in the group of water users and/or institutions of water user farmers association;
 3. implementation of punctual, efficient, and effective water retrieval accordingly to dam operation pattern and guidelines; and
 4. implementation of usage accordingly to decided quality (water allocation group class) in the retrieving place.

Fifth Part

Usage Sustainability

Article 29

Sustainability of water and water power as

material as meant in Article 17 paragraph (3) is materialized by:

- a. educational institutions, instances that have duties of research and development of water resources and institutions that have duties of research and development of settlement through wastewater processing technology development; and
- b. educational institutions and institutions that have duties of research and development on agriculture through development of environmental friendly agricultural technology.
- c. water resources administrator by the sustainability of water resources quality in:
 1. water quality standards; and
 2. water resources environment.
- d. users with:
 1. repeated water usage;
 2. wastewater recycling; and
 3. continuity of water resources quality in:
 - a) water quality standards; and
 - b) water resources environment.

Paragraph 1

Wastewater Processing Technology Development

Article 30

- (1) Development of wastewater processing technology as meant in Article 29 point a can be in the form of practical and economically wastewater processing technology development.

- (2) Practical and economically wastewater processing technology development, as meant at paragraph (1), can be illustrated on example 5.4. of Attachment as one unit and inseparable part of this minister regulation.

Paragraph 2

Environmental Friendly Agricultural Technology Development

Article 31

Development of environmental friendly agricultural technology as meant in Article 29 point b can be in the form of organic fertilizer technology development.

Paragraph 3

Sustainability of Water Resources Quality in Water Quality Standards

Article 32

- (1) The sustainability of water resources quality on water quality standards by water resources administrator as meant in Article 29 point c.1. can be in the form of pollution prevention by:
- a. the construction of collecting ducts and Wastewater Processing Installation (Instalasi Pengolahan Air Limbah/IPAL);
 - b. monitoring and evaluation upon water quality to water and water power usage location for material and to water source location; and
 - c. implementation of operation and maintenance of tidal swamp reclamation network accord-

ingly to the guidelines and/or manual of operation and maintenance.

- (2) Construction of collecting ducts and IPAL as meant at paragraph (1) point a for wastewater that contains hazardous and toxic materials (B3) is done in such a way.
- (3) Wastewater processing that contains B3 as meant at paragraph (2) is carried out in accordance to the laws and regulations.

Article 33

The sustainability of water resources quality in water quality standards by users as meant in Article 29 point d.3.a. can be in the form of water pollution prevention with obligation to process wastewater before dumping to water source for:

- a. users of huge amount of water by building centralized domestic IPAL;
- b. industries by building IPAL for industry, whether it is in industrial area or outside industrial area and the result of wastewater processing is reported periodically to license issuers of water resources usage in accordance to their respective authority and responsibility with copy to institutions related to environmental management and institutions related to water resources management;
- c. hospitals by building IPAL for hospital and the result of wastewater processing is reported periodically to license issuers of water resources usage in accordance to their respective authority and

responsibility with copy to institutions related to environmental management and institutions related to water resources management;

- d. hotels by building IPAL for hotel and the result of wastewater processing is reported periodically to license issuers of water resources usage in accordance to their respective authority and responsibility with copy to institutions related to environmental management and institutions related to water resources management; and
- e. other business activities by building IPAL for other business activities and the result of wastewater processing is reported periodically to license issuers of water resources usage in accordance to their respective authority and responsibility with copy to institutions related to environmental management and institutions related to water resources management;

Paragraph 4

Sustainability of Water Resources Quality in Water Resources Environment

Article 34

The sustainability of water resources quality in water resources environment by water resources administrator as meant in Article 29 point c.2. can be in the form of:

- a. arrangement of water level in peat swamp reclamation network to maintain pyrite layer to be always soaked in water, so that it won't get oxidized; and

- b. arrangement of manual for operation and maintenance of tidal swamp so that seawater intrusion won't happen.

Article 35

The sustainability of water resources quality in water resources environment by users as meant in Article 29 point d.3.b. can be in the form of:

- a. compliance towards water level in peat swamp reclamation network to maintain pyrite layer to be always soaked in water, so that it won't get oxidized; and
- b. implementation of manual for operation and maintenance of tidal swamp reclamation network so that seawater intrusion won't happen.

Paragraph 5

Repeated Water Usage

Article 36

Repeated water usage by users as meant in Article 29 point d.1. is done through:

- a. individual or household can reuse household wastewater (greywater) in order to fulfill the needs that are not daily basic necessities that can be in the form of reuse of food wash water to water plant and livestock needs; and
- b. reuse of irrigation water from one rice terrace to another rice terrace.

Paragraph 6

Water Recycle

Article 37

- (1) Wastewater recycle, as meant in Article 29 point d.2, is obliged to be done by users of huge amount of water, hotel, hospital, and industry by building recycling installation.
- (2) Wastewater recycling, as meant at paragraph (1), can be described at example 5.2. and 5.3. of Attachment as one unit and inseparable part of this minister regulation.

Sixth Part

Mutual Support Usage that between Surface Water
and Ground Water by Prioritizing the Usage of
Surface Water.

Article 38

- (1) Mutual support usage between surface water with ground water by prioritizing surface water usage as meant in Article 17 paragraph (3) is materialized by water resources administrator by increasing surface water supply by:
 - a. constructing dam, reservoir, pool, lake, long storage, or other kinds of water storage to preserve run off water;
 - b. constructing rainwater container that can be in the form of dam, reservoir, pool, long storage, PAH, ABSAH, or other kinds of rainwater container on the roof as well as in the ground to preserve rainwater;
 - c. taking surface water from water source with excess to other place in need;
 - d. utilizing excess surface water for ground water recovery through shallow absorbing well and deep absorbing well; and
 - e. utilizing surface water that penetrates and runs underground by constructing underground barrier wall to form underground reservoir to retain the pervasive run off water and rainwater.
- (2) Mutual support usage between surface water with ground water by prioritizing surface water usage as meant in Article 17 paragraph (3) is materialized by users by prioritizing usage of obtained surface water using method as meant in Article 21.
- (3) Improvement in surface water supply by constructing dam as meant at paragraph (1) point a can be described at example 6.1. of Attachment as one unit and inseparable part of this minister regulation.
- (4) Utilization of excess surface water for ground water recovery by constructing shallow absorbing well and deep absorbing well as meant at paragraph (1) point d can be described at example 6.2.1. and 6.2.2 of Attachment as one unit and inseparable part of this minister regulation.
- (5) Utilization of water surface that penetrate and run underground by building barrier wall as meant at paragraph (1) point e can be described at example 6.3. of Attachment as one unit and inseparable part of this minister regulation.

CHAPTER IV

WATER SOURCES USAGE AS MEDIA

First Part

General

Article 39

- (1) Usage of water source as media as meant in Article 3 paragraph (3) point c is intended to utilize water source with certain purposes.
- (2) Utilization of water source with certain purposes as meant at paragraph (1), for:
 - a. construction at water source can be in the form of construction of bridge, piping network and electrical wiring/telephone network;
 - b. area of seasonal agricultural cultivation or aquaculture at river basin; and
 - c. area of annual plant cultivation at green belt area of lake, reservoir, and dam.
- (3) Water sources usage as media as meant at paragraph (1) is implemented by observing the principles of usage saving, order and justice, correct usage, as well as sustainability of water sources functions.
- (4) Government, regional government, and water resources administrators carry out early education, training, and community assistance for the implementation of water sources usage as media as meant at paragraph (1) and paragraph (3).
- (5) Government, regional government, water resources administrators, and business actors are obliged to socialize and/or to campaign to public through print media or electronic media for the

implementation of water source usage as media as meant at paragraph (3).

- (6) Socialization and/or campaign for water sources usage as media as meant at paragraph (5) is done through counseling, print media, and/or electronic media.

Second Part

Usage Saving

Article 40

Usage saving of water sources as media as meant in Article 39 paragraph (3) is materialized in the usage that in accordance to minimum needs.

Third Part

Order and Justice

Article 41

- (1) Order and justice in water sources usage as media as meant at Article 39 paragraph (3) is materialized by:
 - a. water resources administrator through:
 1. installation of information and/or prohibition board;
 2. access provision for water user to fulfill daily basic necessities;
 3. access allocation for the society to use and/or to enjoy water sources as public space in accordance to decided zone;
 4. prevention of licensing duplication;
 5. requirements demand on licensing technical recommendation consistently; and

6. submitting suggestion on reconsideration upon license that is not implemented in accordance to the provisions stated on the license.

b. users through:

1. access provision for water user to fulfill daily basic necessities; and
2. access provision for the society to use and/or to enjoy water sources as public space.

(2) Information and/or prohibition board, as meant at paragraph (1) point a.1. at:

- a. construction implementation may consist of prohibition to dump excavation results in water source;
- b. river basin may consist of information of plant types suggested or prohibited to plant; and
- c. green belt of lake, reservoir, and dam may consist of information of plant types suggested or prohibited to plant.

(3) Prevention upon licensing duplication as meant at paragraph (1) point a.4. is done by doing orderly administration upon licenses issued.

Fourth Part

Correct Usage

Article 42

Correct usage of water sources as media as meant in Article 39 paragraph (3) is materialized by:

- a. water resources administrator by monitoring that according to the provisions decided by the competent authority; and
- b. users with usage that according to the provisions decided by the competent authority.

Fifth Part

Usage Sustainability

Article 43

(1) Sustainability of water source functions as meant in Article 39 paragraph (3), is materialized by:

- a. water resources administrator by securing main functions of water sources through:
 1. Management of border or green belt;
 2. maintenance of drainage capacity;
 3. maintenance of facilities and infrastructure; and
 4. prevention of pollution.
- b. users by utilizing water source that does not cause damage on water source.

(2) Main functions of water source as meant at paragraph (1) point a involve functions of:

- a. ground water discharge at the spring;
- b. water drainage;
- c. flood control;
- d. water reservoir; and
- e. water biota habitat.

(3) To maintain water biota habitat functions as meant at paragraph (2), it is necessary to allocate water drainage to create appropriate environment for water biota needs.

Paragraph 1

Management of Border or Green Belt

Article 44

(1) Border management as meant in Article 43 paragraph (1) point a.1. intended for the functions security of ground water discharge at the spring is carried out by:

- a. to perform land acquisition at spring location and its border to become regional/state property;
- b. to build strong security fence that does not bother the sustainability of spring functions;
- c. to investigate and to carry out periodic monitoring and evaluation;
- d. to forbid excavation and/or drilling at spring;
- e. to prevent violation upon water source border area by involving society; and
- f. to report the violation of border utilization to regional government to be followed up.

(2) Border management as meant in Article 43 paragraph (1) point a.1. intended for the functions security of water discharge, flood control, and water biota habitat is carried out by:

- a. investigating and carrying out periodic monitoring and evaluation;
- b. preventing violation upon water source border area by involving society; and
- c. reporting the violation upon border utilization to regional government to be followed up.

(3) Green belt management as meant in Article 43 paragraph (1) point a.1. intended for the func-

tions security of water container is carried out by:

- a. investigating and carrying out periodic monitoring and evaluation;
- b. preventing violation upon area of green belt of lake, reservoir, or dam;
- c. reporting the violation upon green belt utilization to regional government to be followed up; and
- d. cultivating crops of plantation and reforestation in the area of green belt of lake, reservoir, or dam.

(4) Border or green belt as meant at paragraph (1), paragraph (2), and paragraph (3) is decided by Government or regional government in accordance to their respective authority and responsibility.

(5) Reforestation in dam green belt area as meant at paragraph (3) point d can be described at example 5.5. of Attachment as one unit and inseparable part of this minister regulation.

Paragraph 2

Maintenance of Drainage Capacity

Article 45

Drainage capacity maintenance as meant in Article 43 paragraph (1) point a.2. is intended for the functions security of water drainage and flood control is carried out by:

- a. cleaning up the channel;
- b. maintaining the transverse and/or parallel construction of water source do not compensate the

capacity and change the direction of drainage;
and

- c. carrying out maintenance of the channel.

Paragraph 3

Maintenance of Facility and Infrastructure

Article 46

Maintenance of facilities and infrastructure as meant in Article 43 paragraph (1) point a.3. is intended for the functions security of flood control and implemented by carrying out operation and maintenance based on decided operation and maintenance manual.

Paragraph 4

Prevention of Pollution

Article 47

Pollution prevention as meant in Article 43 paragraph (1) point a.4. is intended for the functions security of water biota habitat and is carried out by:

- a. using environmental friendly fertilizer and/or pesticide as well as controlling land erosion and solid waste that can cause pollution; and
- b. channeling drainage to the surface of artificial wetland before entering water body.

Paragraph 5

Utilization of Water Source that Causes No Damage on Water Source

Article 48

Utilization of water source that causes no

damage on water source by users as meant in Article 43 paragraph (1) point b, is done by:

- a. making construction formation that will not cause scours on water source;
- b. making construction size that will not reduce the capacity of river drainage; and
- c. implement temporary construction that does not reduce capacity of water source drainage from planned flood discharge.

CHAPTER V

USAGE OF WATER, WATER SOURCE, AND/OR WATER POWER AS MEDIA AND MATERIAL

First Part

General

Article 49

- (1) Usage of water, water source and/or water power as media and material as meant in Article 3 paragraph (3) point d, can be in the form of utilization or retrieving of water, water source, and/or water power, separately or together.
- (2) Usage of water, water source, and/or water power as media and material as meant at paragraph (1), can be in the form of exploration, exploitation, and purification of mining substance from water source.
- (3) Usage of water, water source, and/or water power as media and material as meant at paragraph (1), is implemented by observing the principles of usage saving, order and justice, correct usage, as well as usage sustainability.

- (4) Government, regional government, and water resources administrators carry out early education, training, and community assistance for the implementation of usage of water, water source, and/or water power as media and material as meant at paragraph (1) and at paragraph (3).
- (5) Government, regional government, water resources administrators, and business actors are obliged to socialize and/or to campaign through print media or electronic media to public for the implementation usage of water, water source, and/or water power as media and material as meant at paragraph (3).
- (6) Socialization and/or campaign for usage of water, water source, and/or water power as media and material as meant at paragraph (5) is done through counseling, print media, and/or electronic media, and/or through electronic media.

Second Part

Usage Saving

Article 50

Usage saving of usage of water, water source, and/or water power as media and material as meant in Article 49 paragraph (3) is materialized in the usage that in accordance to minimum needs.

Third Part

Order and Justice

Article 51

- (1) Order and justice in usage of water, water source,

and/or water power as media and material as material as meant at Article 49 paragraph (3) is materialized by:

- a. water resources administrator through:
 - 1. arrangement of water resources utilization zone;
 - 2. arrangement of periodic water balance;
 - 3. monitoring of water allocation,
 - 4. installation of information and/or prohibition board;
 - 5. access provision for water user to fulfill daily basic necessities;
 - 6. access allocation for the society to use and/or to enjoy water sources as public space in accordance to decided zone;
 - 7. prevention of licensing duplication;
 - 8. requirements demand on licensing technical recommendation consistently; and
 - 9. submitting suggestion on reconsideration upon license that is not implemented in accordance to the provisions stated on the license.
- b. users through:
 - 1. compliance towards the provisions of water resources zone utilization;
 - 2. access provision for water user to fulfill daily basic necessities; and
 - 3. access provision for the society to use and/or to enjoy water sources as public space.

- (2) decision on water resources utilization zone as meant at paragraph (1) point a.1. is done by Minister, governor, regent/mayor in accordance to their respective authority and responsibility.
- (3) Water balance as meant at paragraph (1) point a.2. is done by Government or regional government in accordance to their respective authority and responsibility.
- (4) Information and/or prohibition board as meant at paragraph (1) point a.4. may consist of:
 - a. mining method;
 - b. permitted mining tools;
 - c. prohibition on dumping mining substance washing waste to water source; and
 - d. information of mining zone.
- (5) Prevention upon licensing duplication as meant at paragraph (1) point a.7. is done by doing orderly administration upon licenses issued.

Fourth Part

Correct Usage

Article 52

Correct usage of water, water source, and/or water power as media and material as material as meant at Article 49 paragraph (3) is materialized by:

- a. water resources administrator through:
 - 1. technical recommendation provision in accordance to decided water resources utilization zone; and
 - 2. implementation of water distribution accordingly to decided allocation.

b. users with:

- 1. utilization in accordance to decided water resources utilization zone; and
- 2. implementation of water retrieval and usage accordingly to decided allocation and usage.

Fifth Part

Usage Sustainability

Article 53

- (1) Sustainability of usage of water, water source, and/or water power as media and material as meant in Article 49 paragraph (3) is materialized by the water resources administrator and business actors through damage prevention at water source and its infrastructures.
- (2) Prevention of water source and its infrastructure damage by water resources administrator as meant at paragraph (1) is done through:
 - a. periodic investigation to carry out monitoring and evaluation;
 - b. operation and maintenance based on the decided manual for operation and maintenance;
 - c. immediate repair upon minor damage;
 - d. reporting upon deviation of water source usage that cause major damage as well as suggesting the handling; and
 - e. empowerment of water resource care society.
- (3) Prevention of water source and its infrastructure damage by business actors as meant at paragraph (1) is done through:

- a. avoiding deviation of water source usage that cause damage;
- b. carrying out repair upon minor damage that caused by water resource usage; and
- c. water resources care.

CHAPTER VI

WATER RESOURCES USAGE IN THE STATE OF EMERGENCY AND IMMEDIATE NEEDS

Article 54

- (1) Usage of water in the state of emergency and immediate needs is excluded from the provisions as meant in Article 2.
- (2) State of emergency as meant at paragraph (1) is a unit and condition with emergency nature.
- (3) In the state of emergency as meant at paragraph (2), Government and/or regional government have authority to regulate and to stipulate the usage of water resource for the interest of conservation, preparation of construction implementation, and fulfillment of water resource usage priority.
- (4) Immediate needs as meant at paragraph (1) is a unit and a certain situation that compels Government or regional government to make swift decision to change the plan of water resource supply.

Article 55

- (1) Water resources usage in the state of emergency as meant in Article 54 paragraph (3) includes:
 - a. water usage for conservation interest can be in the form of water source flushing in the

city, settlement area, and area in which the water has suffered pollution as effect of industrial activities;

- b. water resources usage for preparation of construction implementation for example to overcome sudden damage happens to water resource infrastructure (breached dike); and
- c. water usage for priority fulfillment can be in the form of fulfillment of daily basic necessities in the time of drought and water usage to supply irrigation area water needs that suffers drought to prevent susceptibility of food security.

- (2) Water resources usage for immediate needs as meant in Article 54 paragraph (4) includes water resources usage to overcome drought, extinguishing forest or land fire, needs of national security and defense, and to overcome impact of disaster that cause short on water.

Article 56

- (1) State of emergency and immediate needs as meant in Article 54 are reported to water resources administrator for changing on swift decision-making in the usage of water resource.
- (2) Water resources administrator is obliged to monitor the impacts in quantity and quality of water resources usage as meant at paragraph (1).
- (3) Water resources usage as meant at paragraph (1), is informed to the users by water resources administrator for usage adjustment.

- (4) Water usage for the interests as mentioned in Article 55 paragraph (1) point a and point b is allocated in dam operation pattern and water allocation in other water source by water resources administrator.

CHAPTER VII OTHER PROVISIONS

Article 57

- (1) Institutions related to the usage of water resource, regional government, and water resources administrator give incentive and disincentive based on assessment on water resources users toward the implementation of water resource usage principles.
- (2) Incentive as meant at paragraph (1) can be in the form of:
- dispensation on water resources management service;
 - ecolabel provision;
 - fish seed provision;
 - plant seed provision;
 - facility provision that can be in the form of tax decrement, venture capital; and
 - award provision.
- (3) Disincentive as meant at paragraph (1) can be in the form of:
- progressive tariff provision; and/or
 - restriction on business

Article 58

By the stipulation of this minister regulation:

- users of huge amount of water, hotel, hospital, and industry are obliged to utilize rainwater and water from wastewater recycle at the latest 5 (five) years after this minister regulation stipulated; and

- regional government is obliged to arrange regional regulation needed to implement the provisions stated in this minister regulation in accordance to respective authority, condition, and needs.

CHAPTER VIII FINAL PROVISIONS

Article 59

This minister regulation starts to take effect since the stipulation date.

For everybody to acknowledge this regulation, ordering the promulgation of this minister regulation to be placed in the State Gazette of Republic of Indonesia.

Stipulated in Jakarta
on 28 March 2011

THE MINISTER OF PUBLIC WORKS
REPUBLIC OF INDONESIA,
Sgnd.
DJOKO KIRMANTO

Promulgated in Jakarta
On 25 April 2011

THE MINISTER OF LAW AND HUMAN RIGHTS
REPUBLIC OF INDONESIA,
Sgnd.
PATRIALIS AKBAR

THE STATE GAZETTE OF REPUBLIC OF INDONESIA
NUMBER 250 YEAR 2011

Editorial Note :

- Under technical reason, Attachments are not included.

(A)