Detailed Rules for Guiding Activity of Water-efficient Top Runner in Major Water Consumption Enterprises Issued, Trial Implementation Will Be Carried out in Papermaking Industry

On March 2nd, 2017, the Ministry of Industry and Information Technology, the Ministry of Water Resource, the National Development and Reform Commission and the General Administration of Quality Supervision, Inspection and Quarantine jointly issued the Detailed Rules for Guiding Activity of Water-efficient Top Runner in Major Water Consumption Enterprises (hereinafter referred to as "the detailed rules"), proposing to encourage enterprises to learn from water-efficient top runner and promote the establishment of a water-conservation industrial system by regularly publishing the top runners list and water-efficient index. The title of "Water-efficient Top Runner" is valid for 2 years, and enterprises won such title will be granted with such preferential policies as preferential

support of central finance to water-saving technical improvement projects, increased line of credit, etc.

The detailed rules notes that considering water consumption amount and technical process level of the enterprises and other factors and combining with current situation such as criteria, management, etc., the iron and steel, ethylene, textile dyeing and finishing, papermaking and monosodium glutamate industries are chose to that trial implementing, and then implementation scope will be expanded gradually to cover key water-consuming industries such as the electric power, iron and steel, textile, papermaking, petrochemical, chemical industry, etc.

Table 1 Technical Requirements (papermaking industry)

Index	Product	Checked value
Water withdrawal quantity per unit of product/m ³ ·adt ⁻¹	Bleached chemical wood (bamboo) pulp	≤70
	Unbleached Chemical wood (bamboo) pulp	≤50
	Chemi-mechanical wood pulp	≤30
	Beached chemical non-wood (wheat straw, reed, bagasse) pulp	≤100
	Deinked waste paper pulp	≤24
	Un-deinked waste paper pulp	≤16
Water withdrawal quantity per unit of product/ m ³ ·t ⁻¹	Newsprint	≤16
	Printing and writing paper	≤30
	Tissue paper	≤30
	Packaging paper	≤20
	White board	≤30
	Boxboard	≤22
	Corrugating medium	≤20
Recycling ratio/%	Pulp	≥70
	Paper and board	≥85

Note: a. See GB/T 26927-2011 Water-saving Enterprise - Papermaking Industry for calculation method of parameters.

- b. An addition of 10 m³/t based on this quota is allowed for pulp board produced with a pulp machine.
- c. An addition of 10 m³/t based on this quota is allowed for bleached deinked waste paper pulp.
- d. An addition of 10 m³/t based on this quota is allowed for coated paper and board.
- e. Pulp is measured as ton of air-dried pulp (water content 10%).
- f. Water withdrawal quantity quota indexes of pulp, paper and board are calculated separately.
- g. Requirement for high yield unbleached semi-chemical wood and straw pulp shall be executed as that for unbleached chemical wood pulp, and requirement for mechanical wood pulp shall be executed as that for chemi-mechanical wood pulp.
 - h. Water withdrawal quantity of specialty pulp, tissue paper and specialty paper is not covered by this table.

Two "preferential" support policies are proposed in the detailed rules: preferential support of relevant central financial funds to water-saving technical modification projects; preferential support of central budgetary investment to the water efficiency increase-related modification carried out by top runner enterprises. In addition, the detailed rules encourages involvement of financial institutions, to provide an increased line of credit to top runner enterprises, increase guarantee service and credit support and expand green finance.

It is mentioned in the detailed rules that an enterprise who applies for the title of "Water-efficient Top Runner" shall meet following requirements:

- Obey national, industrial and local relevant water-saving policies and standards;
- Have legal procedures for intaking water resource, no excessive water intaking in the last three years;
- No major safety and environmental accidents or illegal behavior in the last three years;
 - ----An independent legal entity with more than 0.3 million m³/a of

water intaking;

- Water-efficiency indexes for the previous year meet the national standard requirements for water-saving enterprises and on the leading level of the industry;
- Not use water-using equipment or devices that are explicitly prohibited or listed in the catalogue of prohibited or obsolete products by the state;
- —— Implement water-saving "Three Simultaneities" and "Four in Place" system in new rebuilding or expanding projects;
- —Establish water saving and management system; have watersaving measures in all production divisions; have complete water using measuring system and statistical management system; water measuring devices meet the requirements of the *General Provi*sions on Equipping and Managing of the Measuring Instrument of Water in Organization of Water Using (GB 24789) and are calibrated according to laws.

See Table 1 for the specific technical requirements for the paper-making industry.