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Progress of Water Pollutant Discharge Standards for industries in China

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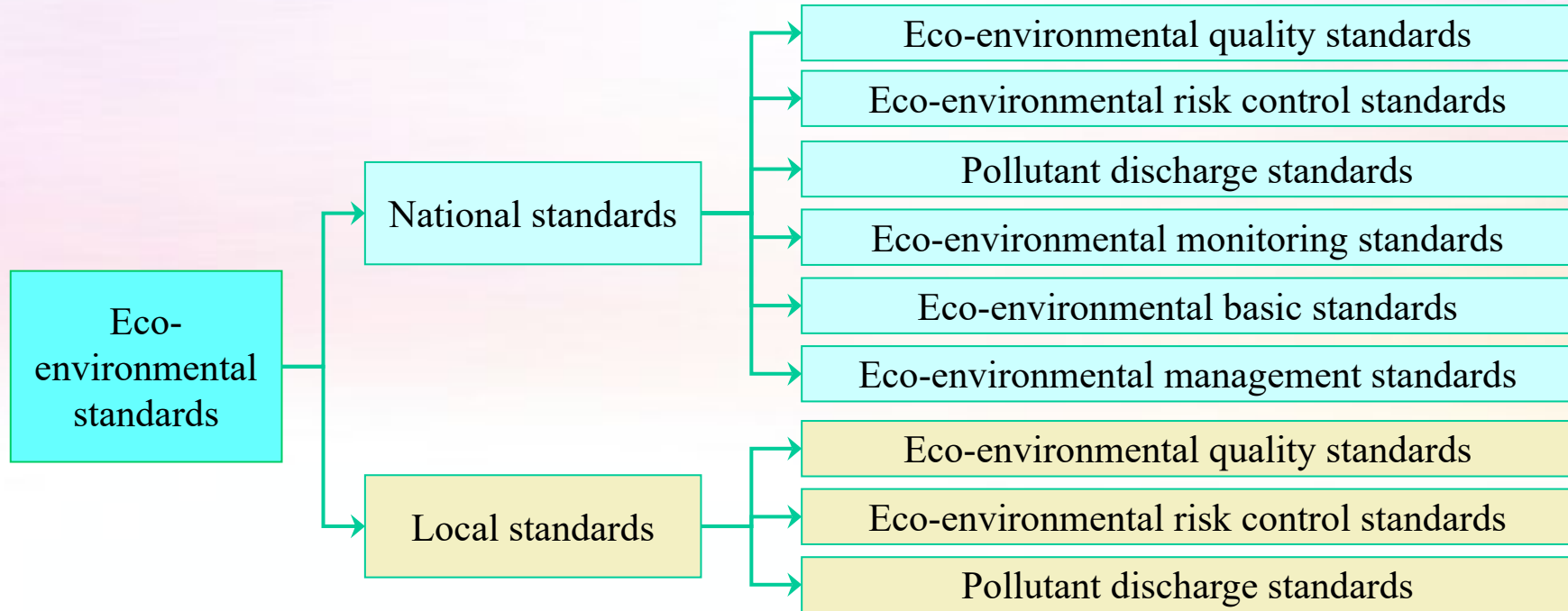
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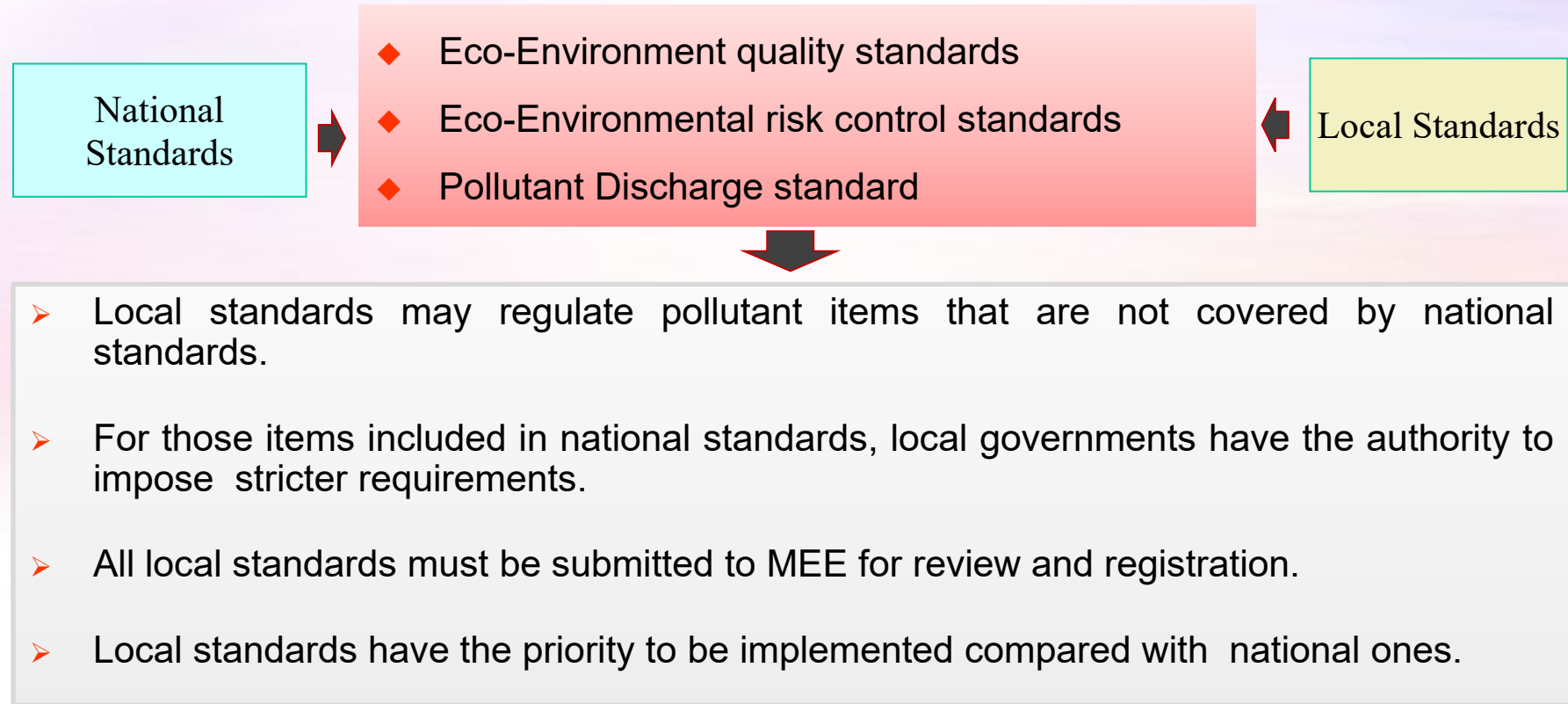
1. System of water eco-environmental standards in China

- China has established an eco-environmental standards system with **six categories in two levels**, including more than **2400** national standards and **260** local standards.



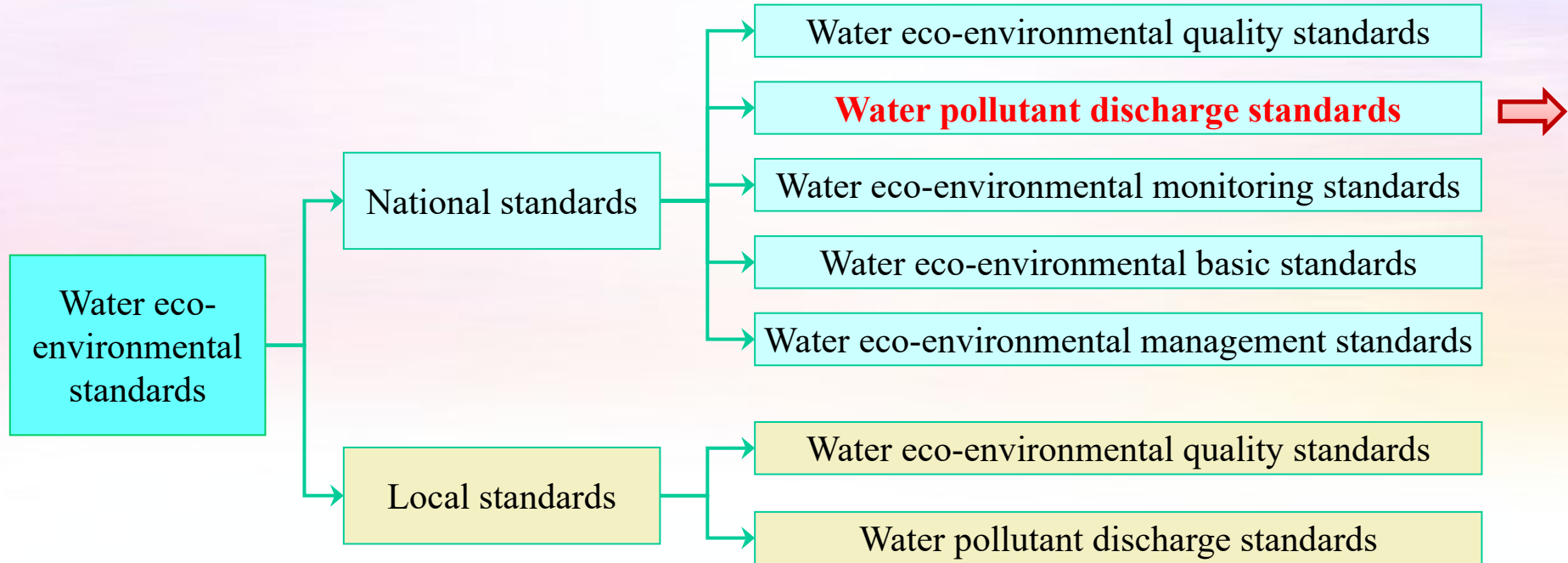
Eco-environmental Standard Framework

1. System of water eco-environmental standards in China



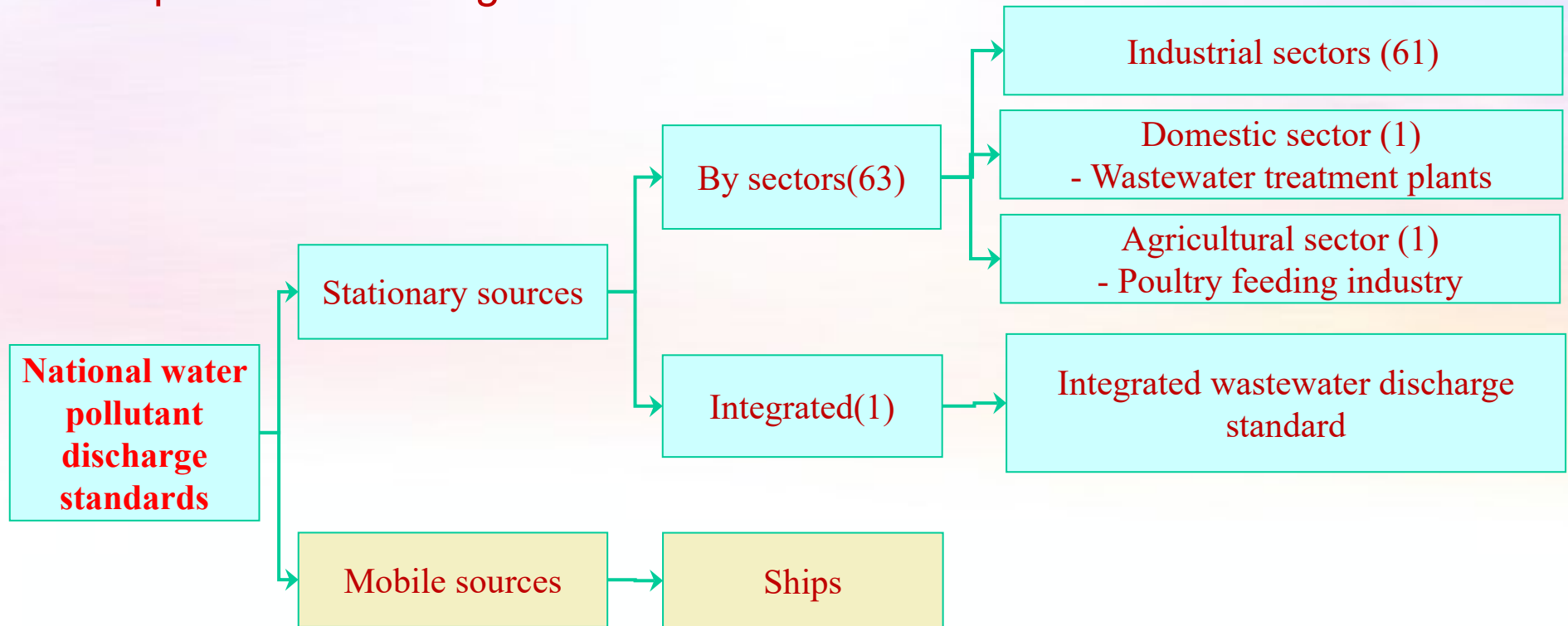
1. System of water eco-environmental standards in China

■ System of water eco-environmental standards



1. System of water eco-environmental standards in China

■ Water pollutant discharge standards



1. System of water eco-environmental standards in China

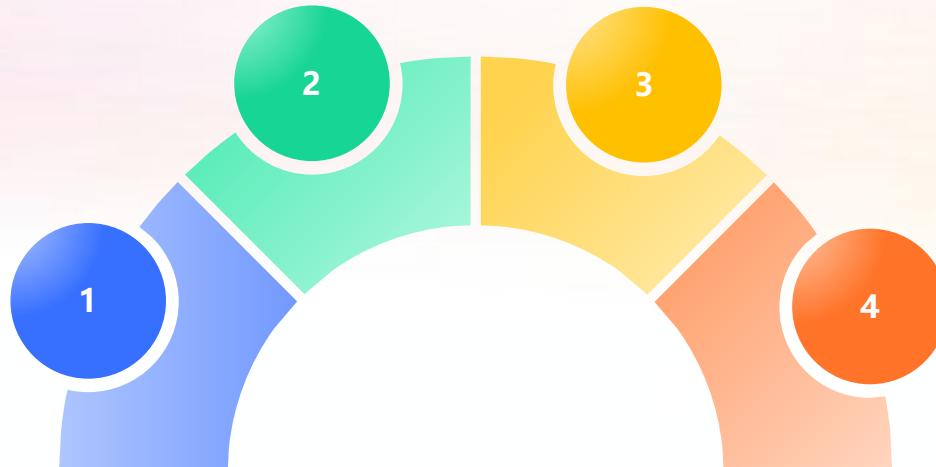
■ Features of national water pollutant discharge standards

- Cover 80% of COD and $\text{NH}_3\text{-N}$ emissions
- Cover 90% of heavy metals emissions

Mainly based on industry discharge standards

158 kinds of control items

Comprehensive and rigorous



International medium to advanced limitation level

2. Progress of water pollutant discharge standards in China

- Pay greater attention to strengthening the risk prevention and control of toxic pollutants through discharge standards

New standards

- ◆ Discharge standard of water pollutants for pesticide industry (GB 21523 - 2024) ➡
- ◆ Discharge standard of water pollutants for electronic industry (GB 39731 - 2020)
- ◆ Revision of the discharge standards for relevant industries with thallium, such as iron and steel industry, lead and zinc industry, etc.

2. Progress of water pollutant discharge standards in China

■ Introduction of discharge standard of water pollutants for pesticide industry

Primary standards

Effluent standards of pollutants for
heterocyclic pesticides industry
(GB 21523—2008)

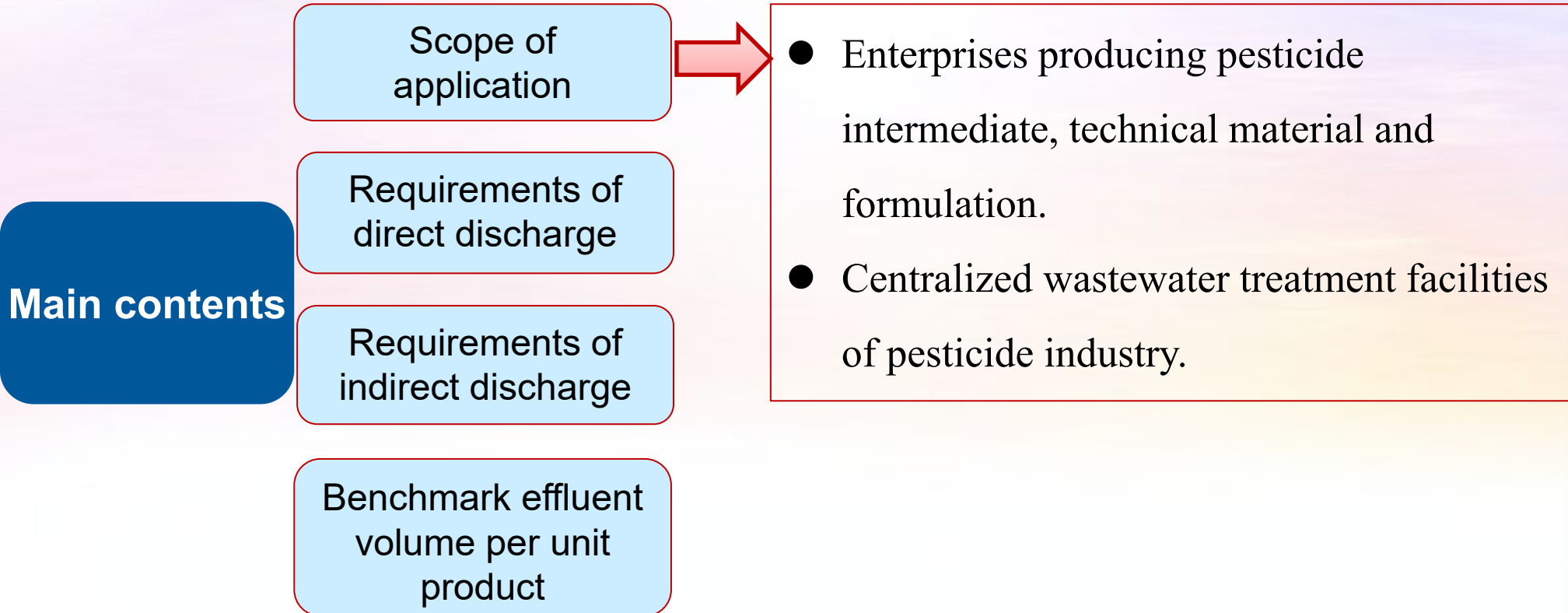
Integrated wastewater discharge standard
(GB 8978—1996)

Discharge standard of water
pollutants for pesticide industry
(GB 21523—2024)



2. Progress of water pollutant discharge standards in China


■ Introduction of discharge standard of water pollutants for pesticide industry



2. Progress of water pollutant discharge standards in China

■ Introduction of discharge standard of water pollutants for pesticide industry

Requirements of direct discharge



- Conventional pollutants:10, including pH、 COD_{Cr}、 total salt content etc.
- Characteristic pollutants:18, including fluoride, benzene, pesticide active ingredients etc.
- Whole effluent toxicity:1,the acute toxicity of zebrafish eggs.
- Limitations are in the same level with international standards.

2. Progress of water pollutant discharge standards in China

■ Introduction of discharge standard of water pollutants for pesticide industry

Requirements of indirect discharge




- If the effluent is discharged into municipal wastewater treatment facilities, the limitation is very strict.
- If the effluent is discharged into centralized wastewater treatment facilities of pesticide industry, all the control items could be discharged according to negotiation limitations, except the pesticide active ingredients.
- If the effluent is discharged into other centralized wastewater treatment facilities, conventional pollutants could be discharged according to negotiation limitations.

2. Progress of water pollutant discharge standards in China

■ Introduction of discharge standard of water pollutants for pesticide industry

Benchmark effluent
volume per unit
product

11 categories and
40 sub-categories



Be good for

- Refine management.
- Preventing the diluted discharge.
- Supporting the implementation of pollutant discharge permit system.

1	Organophosphorus pesticide
2	Pyrethroid pesticides
3	Organosulfur pesticides
4	Triketone pesticides
5	Phenoxy acid pesticides
6	Sulfonylurea pesticides
7	Amide pesticides
8	Organochlorine pesticides
9	Carbamate pesticides
10	Biological pesticides
11	Heterocyclic pesticides

3. Prospect of next step work

Present situation

- ◆ Water eco-environmental quality has been improved in China.
- ◆ International medium to advanced limitation level.
- ◆ Risk control and ecology protection need to be strengthened.



Key points of standard development

- ◆ **National standards**
 - Basic control requirements for conventional pollutants.
 - Strengthen the control of characteristic pollutants.
 - Advance the pollution control more accurately, scientifically and lawfully.
- ◆ **Local standards**
 - More strict limitation for conventional pollutants according to the necessity of water quality improvement .
 - Supplement the control requirements of characteristic pollutants.

Lucid waters and lush mountains are invaluable assets!



THANK YOU !

