

Session 1: Understanding BAT around the World

Understanding BAT in Korea

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01 CHAPTER Overview

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Integrated Environment Permit Legal Process, Korea



Before the Integrated permit

Integrated Permit Ex-Ante Consultation

(Article 5, Paragraph 1 of the Law)

Period for Improvement

(Article 6, Paragraph 1 of the Law)

Analysis Conducted to Assess the Impact of Pollutants

(Article 6, Paragraph 4, Subparagraph 2 of the Law)

Technical review

(Article 29, Paragraph 1 of the Law)

Permit review

(Article 7, Paragraph 1 of the Law)

Integrated permit

Self-regulation of the workplace

(Article 6, Paragraph 4, Subparagraph 3 of the Law)

Measurement of Pollution Level

(Article 13 of the Law)

Reporting of Start of Operation

(Article 12 of the Law)

Operating Existing Discharging Facilities, etc. and Prevention Facilities

(Article 7, Paragraph 5 of the Enforcement Rules)

Integrated Permit

(Article 7, Paragraph 1 of the Enforcement Rules)

After the Integrated permit

Regular/Periodic inspection (including measurement devices)

(Article 31 of the Enforcement Rules)

Annual Report Submission/Review

(Article 33 of the Law)

5-year post-management/business environmental management level assessment

(Article 4, Paragraph 2 of the Enforcement Decree)

Amendment of Criteria for Permission and Permissible Discharge Standards(circular permitting process) (Article 9, Paragraph 1

of the Law)

K-BREF & Integrated permit

+10 year

(5) Publication of K-BREF III

0 year

국립환경과학원 National Institute of Environmental Resear

5 BAT-AEL Ⅲ
Focus on high
volume emissions

① Publication of K-BREF I

K-BREF III
Revision(2nd)

Annual report
(analytical summary*),

Application of integrated permit

Post-management
(Regular/Periodic
inspection)

4

Revised

permit

Annual report (analytical summary*),

2 Maximum

discharge

standards

K-BREF II

Revision(2nd)

K-BREF II

Revision(1st)

Post-management (Regular/Periodic inspection)

4 Maximum discharge standards

③ Publication of K-BREF II

+5 year

Focus on high
volume emissions
ex) TSP, SOx, NOx, etc.

① BAT-AEL I

3 BAT-AEL II
Focus on health
affected substances
ex) Organic chemistry

-vinyl chloride, etc.

year

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K-BREF III

Revision(1st)

* Institutional performance analysis by approximately 1,400 establishments and 19 industries

+3 year

K-BREF Roadmap



- 1st version (2017-2021) 19 sectors BREFs and 1 common BREF
- 2nd version (2022-2026) 5 sectors BREFs revision. And, Waste Treatment(e.g., landfill) and Cement are newly added.
- * Legally, every 5 to 7 years of revision is required.

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	1 st version							2 nd version						3 rd version					
Power generation and steam Waste Incineration	Status*	Draft**		Publish	Enforce		Status	Draft	Annual report (review)	Publish	Apply			Draft	Publish				
3. Steel 4. Nonferrous5. Organic chemistry		Status	Draft		Publish	Enforce		Status	Draft	Annual report (review)	Publish	Apply			Draft	Publish			
6. Petroleum 7. Inorganic 8. Fine chemistry 9. Fertilizer & N comp.			Status	Draft		Publish	Enforce		Status	Draft	Annual report (review)	Publish	Apply			Draft	Publish		
10. Pulp and paper 11. Electronic component 12. Semiconductor 13. Textile dyeing				Status	Draft		Publish	Enforce (10, 11)	Enforce (12, 13)	Status	Draft	Annual report (review)	Publish	Apply			Draft	Publish	
14. Meat 15. Alcohol 16. Plastic 17. Automotive parts					Status	Draft		Publish	Enforce		Status	Draft	Annual report (review)	Publish	Apply			Draft	Publish
18. Common facilities (Boiler)							Status	Draft	Publish	Apply		Status	Draft	Publish	Apply				
19. Waste treatment								Status	Draft	Publish	Enforce		Status	Draft	Publish	Apply			
20. Cement									Status	Draft	Publish	Enforce		Status	Draft	Publish	Apply		
21. All sector's general BAT (Air and Water)												Status	Draft	Publish	Apply				
22. All sector's general BAT (EMS)													Status	Draft	Publish	Apply			

* Status: Technique status survey

** Draft: BREF draft

\$ Annual report review: Business with integrate permission needs to submit monthly plant operation data, and then, K-BREF Secretariat analyzes data and produces annual report every business and sector.



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CHAPTER

Success and challenges



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Success (Existing plant Permission: `17~24 with sectors)

Quantitative aspect: Need more time (i.e., decrease of pollutants)

- Apparently some decreases of TSP, SOx and NOx are observed in PP and WI

Qualitative aspect: Increase of industrial interest on BAT and

of investment on installation and human resources

Challenges

Importance of infra on Ex-Post Management and Countermeasure Collaboration with advanced and developing coutries Further reflection on Green house gas, net zero policy, etc.



Thank you for your attention



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