



Introduction
Vietnam standard system
(in process of completion)

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- I. Introduce Vietnam Environmental Protection Law 1993 - 2005
- II. Environmental Standard
 1. Enviro Quality Stand
 2. Discharge Standard
 3. Supporting Standard
- III. Adding and revising for finalization

I. Introduce Vietnam Environmental Protection Law (VN-EPL) 1993 - 2005

1- Environ Protection Law 27/12/1993: 7 chapters, 57 articles

After 10 year implementation: - Advantages, Efficiencies
- Disadvantages, revision required

Reasons: 4

- 1- Disvantages and shortages of Vietnam Environ Protection Law itself
- 2- Situation of environ pollution becomes more serious and urgent
- 3- International integrate
- 4- Country building, economic development together with environ protection for Sustainable Development

2- Environ Protetion Law 12/12/2005: 15 chapters, 136 articles:

- + National Parliament XI- 8 course approved date 29 / 11 / 2005.
Announcement Document No 29/2005/L/CTN date 12 / 12 / 2005.
- + Every chapters and articles in Environ Protection Law 1993 have been revised and added.
- + New Environ Protection Law puts in force 1/7/2006

Chapter I. General Regulation: 8 articles (Articles 1 -7)

Chapter II. Environ Standard: 6 articles (articles 8 - 13)

Chapter III. SEA and EIA, Environ Protection commitment: 13 articles (articles 14 - 27)



Chapter IV. Conservation and Appropriate usage of natural resources- 7 articles (articles 28 - 34)

Chapter V. Environ protection in production, market and service: 15 articles (35 - 49)

Chapter VI. Environ protection in urban, residence areas . 5 articles (50 - 54)

+ Chapter VII. Sea, river and other water sources Environ protection
11 articles (55 - 65).

New chapter in Environ Protection Law 2005

Chapter VIII. Waste Management 20 articles (66 - 85)

Chapter IX. Avoiding, Copping with environmental accidents, pollution overcoming and environ recovering 8 articles (86 - 93).

Chapter X. Environ monitoring and Information: 12 articles (94 - 105).

Chapter XI. Environ Protect resources : 12 articles (106 - 117).

Chapter XII. International coordination in environ protection: 3 articles (118 - 120)

Chapter XIII. Responsibility of government management agencies, environ protection counterparts/stakeholders: 4 articles (121 - 124).

Chapter XIV. Inspection, Fine and Deal with complaint, and Pay for environ damage couses - 9 articles (125- 134).

Chapter XV. Operating regulation – 2 articles (135 - 136) regulated about operating validaion and guidance

II. Documentary under Law to guide how to operate The Environ Protection Law

- ✓ Legal orders of National Parliament Committee: 22 documents,
- ✓ Protocols of Government: 79 documents,
- ✓ Decision of Prime Minister: 57 documents,
- ✓ Direction of Prime Minister: 54 documents
- ✓ Decision of Ministries and parallel agencies: 64 documents
- ✓ Direction of Ministerial level: 06 documents
- ✓ Circuler of Ministries and parallel agencies: 53 documents,
- ✓ Regulation of central provinces and cities: 08 documents

Source: *Database of IET, 2004*

2 Important protocol for Law operation guidance

1. Protocol No. 80/2006/NĐ-CP date 9/8/2006 of Government about Detailed regulations and guidance for operation of some articles in Environ Protection Law
2. Protocol No. 81/2006/NĐ-CP date 9/8/2006 of Government about Fining for Administration break-law regarding to environ protection.

II. Environmental Standard

(State management tool in environmental protection)

1. **Environ Quality Standard:**
(Standards, Permitted limitation regulated to be based on for environ management)
2. **Discharge standards:** (Control wastes discharged in to surrounding environ at certain time and areas).
3. **Supporting standard:** (Standardized methods for sampling, analyzing, etc.)

Environmental standard

- **International standards:** ISO, ASTM, AO/AC, US-EPA, Japanese standards, etc.
- **Vietnam standards:**TCVN, TCN, TCCS
- **Implementation/application?**

II Environmental quality standard system

List of Vietnam environ standards:

1. Environ Standard for Soil
 2. Environ Standard for Air
 3. Environ Standard for Noise
 4. Environ Standard for Radiation and Ionization
 5. Environ Standard for Residence area
 6. Environ Standard for Production area
 7. Environ Standard for Forest protection
 8. Environ Standard for bio-organism system
- etc

11. Sea environment standard;
12. Environ Standard for nature and natural landscape protected areas;
13. Environ Standard for planning the industrial, urban and civil construction;
14. Environ Standard for transportation, storage, use of radioactive and toxic materials;
15. Environ Standard for exploiting the pit and open-cast mines;
16. Environ Standard for traffic means;
17. Environ Standard for factories who use microorganism;
18. Environ Standard for protecting the bowels of the earth;
19. Environ Standard for environmental protection of tourist areas;
20. Environ Standard for import and export;
21. Environ Standard for hospital and special treatment areas.

- Approx. **360 TCVN** in environ have been issued and put in force .
Of which, number of **TCVN prepared based on International standards and Developed country standards.**

Date 25-06-2002, MOSTE issued the Decision No. 35/2002/QĐ-BKHCNMT for Vietnam Standards which forced application:

- *12 TCVN for Air quality,*
- *15 TCVN for Water quality*
- *2 TCVN for Noise level*
- *1 TCVN for Soil quality*
- *1 TCVN fir Vibration level*

These standards put in force date 01-01-2003.

III. Adding and revising for finalization

- 1- Attitude/Aware: Force- Voluntary – agreement: under law, closely and clearly.
- 2- Application: - Apply TCCLMT- TCT : closely and clearly
- 3- Waste quacity/pollutant load: Volume, concentration per day (calculation, apply as regulation)
- 4- Regulations for geography, applied areas: NA
- 5- Standard for solid waste: NA
- 6- Regulation for discharge/emission time: NA

Disadvantages/shortages

For Environ Quality Standard:

Standard regulated for NH₃, NO₂- vμ NO₃-

- Conc. of NH₃ in industrial WW (category A): 0,1 mg/L lower than that of drinking water (3 mg/L)?
- No regulation about conc. of NO₂- in underground water ??? Should be added in standard due to nitrate may cause cancer disease
- All form of nitrogen compounds should have standard including total nitrogen when assess water for different usage
- purpose.

2. Standard for solid content

- Clarify clearly total solid is Suspended Solid plus Dissolved Solid?

3. Standard for pesticides

- Only have PCB standard for industrial WW discharged to river/lake for aquatic-organism protection but not for water quality for other purposes?
- Conc. of PCB in industrial WW discharged to lake (TCVN 6985 - 2001: 0,02 mg/L), where it is more accumulated higher than that when discharged to river (TCVN 5934 - 2001: 0,05 mg/L) *Same purpose to protect aquatic-organism?

- Standard for total pesticide (except DDT) should be reviewed because:

+ Analysis method for total pesticide is not available

+ Types and groups of pesticides are very diversity including 4 major groups:

Chlorinate Pesticides

Organic phosphate pesticides

Cabamate pesticides

Pytheroid pesticides

Therefore standards should be issued for above groups, so:

- Analysis result will be more particulate

- Avoiding analysis a specific pesticide which may not be representative for all other pesticides in water environment.

4. Standard for oil and grease

- Conc of oil/grease of industrial WW discharged to river (TCVN 5934:2001), to lake (TCVN 6985:2001) and coastal zone (TCVN 6986:2001) for aquatic organism protection and for drinking water (TCVN 6981:2001) is 5-10 time higher than that of in industrial WW (TCVN 5945:1995)?

- This parameter should be added in to Standard for industrial WW discharged in river/lake for sport /tourist purposes

Parameter	TCVN-5502:2003	Indus WW (Categ. A)
Total Nitrogen	14	30,1
As	0,01	0,05
Cu	1,0	0,2
Total Cr	0,05	0,25
Floua	0,7-1,5	1,0
Zn	3	1
H2S	3	0,2
Mn	0,5	0,2
CN	0,07	0,05
Total activity of alpha	3pCi/l	0,1Bq/l
Total activity of Beta	30pCi/l	1,0Bq/l

**5. TCVN-5502:2003:
For Drinking water supply**

- ❖ Standard for industrial WW discharged to receiver for driking water supply purpose is higher than that of drinking water.
- ❖ Why no standard for amonium and nitrite in underground water whereas nitrate is not majority because lower DO
- ❖ Same standards for different industrial WW sources is not appropriate.
- ❖ Unit for radiation level alpha and beta should be consistent.

6. Standard on concentration of pollutants in coastal water (TCVN5943: 1995) for aquaculture has inadequate problem as follows:

Parameter	Limited value mg/l	Comment
Clo	0,01	These parameters have different toxic character, so they should have different limited values
Cu	0,01	
Zn	0,01	
CN	0,01	
As	0,01	
Tæng TTS	0,01	

7. TCVN 6774-2000

Water quality-Fresh water quality for protecting aqua life

Standard on plant-protecting chemicals, clo-organic group.

Paramete	Unit	Standard
Aldrin/Dieldri n	µg/l	<0,008
Endrin	µg/l	<0,014
DDT	µg/l	<0,004
Endosulfan	µg/l	<0,01

The standard values are too low, so it is very difficult to analyse such low values.

8. Standard on Air Quality (TCVN 6992:2001 – TCVN 6996: 2001)

This standard doesn't regulate for the special industries and the detail values for each input material (eg. For electric industry: oil, coal, gas) and so, the electric industry has to invest the air treatment facility if it is forced to follow this standard; the same period of validity for all subjects (from 01-01-2003) and lack of a appropriate rout applied for these standards creates inadequate problems during the operation of TCVN 2001.

(Business forum Daily News: Monday, 19/07/2004)

Difficulties of applying laws and under-law documents on environmental protection:

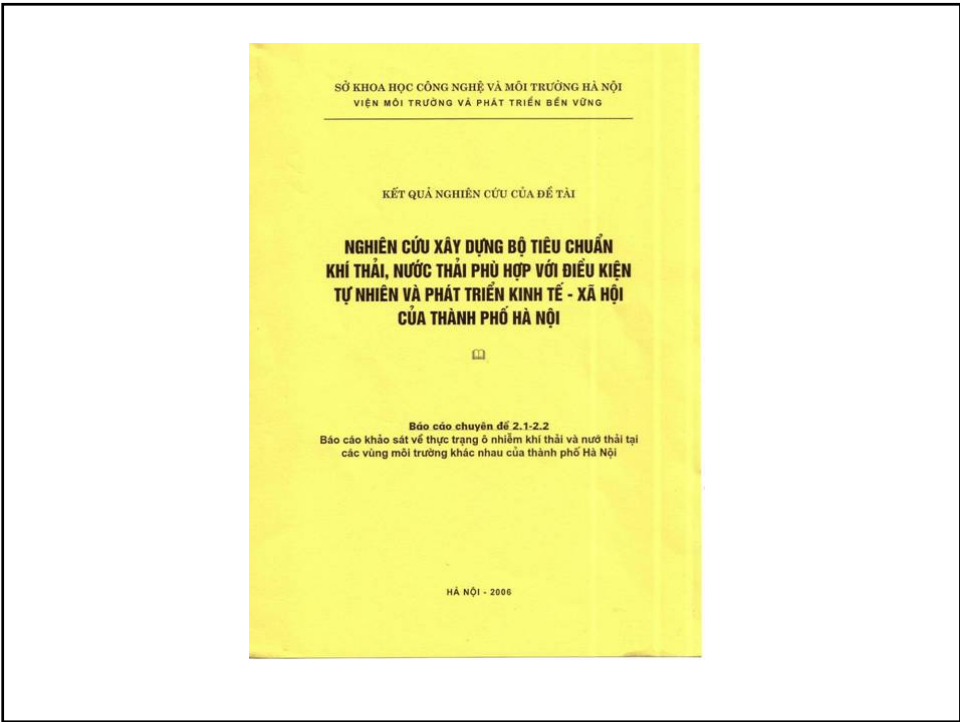
- Lack of database
- Weakness of human source and capacity of enforcement
- Lack of synchronism of legal framework, and unification of legal documents.
- Difficulty of application into reality of collecting environmental fees,
- + Localities have not got enough capacity and facility to identify exactly the pollution level, pollution quantity of pollution sources in order to calculate the environmental fees...
- + Local governments have the right to issue the certificates of meeting the environmental standards for the local enterprises but also have many difficulties during the implementation.
- + The amount of money which is collected from the above fees has not been used all for improving the environmental quality.

Comments of Vietnamese environmental standard system

- It is the legal corridor for every activities of environmental protection. management, treatment in Vietnam
- It is the effective tool to obey the laws
- It is the tool to ensure the sustainable development
- It is the tool for the regional and international integration
- It is the legal corridor for protecting the interest of Vietnam in front of foreign investors and enterprises, protecting the soil, water, air environment, coasts, islands, etc. of Vietnam

Supplement - improvement

- ***Continue to supplement, revise***
- ***Improve step by step***
- ***Continuously update and improve***



MỘT SỐ TRANG THIẾT BỊ CỦA VIỆN CÔNG NGHỆ MÔI TRƯỜNG



ICP-MS



AAS



LCMS



GC-MS



Thank you for your attention!

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