



ASSESS THE IMPACTS OF TRANG CAT LANDFILL IN HAI PHONG TO THE WATER ENVIRONMENT AND PROPOSED SOLUTION

WHY WE DID THIS?

Does the landfill site affect to the surrounding water source?

Whether or not the landfill site meet the safety condition for all the surrounding water source?

Whether or not the water source around the landfill is safe to use in aquaculture?

APPLIED RESEARCH METHODS

Surveying and data collection methods.

System analysis method.

Social investigation.

Collecting, analysis and evaluating data.



Map of Trang Cat landfill on a radius of 5km



TT	Criteria	Unit	Symbol		VNC 40: 25:2009/TER			
			Sample N1	Sample N2	2011/ TER	VNC		
					B	A	B1	B2
1	pH	-	7,2	7,1	5,5 - 9	-	-	-
2	DO	mg/l	5,7	5,6	-	-	-	-
3	TSS	mg/l	15	17	-	-	-	-
4	COD	mg/l	10	15	150	50	400	300
5	BOD ₅	mg/l	2	2,5	50	30	100	50
6	NH ₄ ⁺	mg/l	1,5	1,5	10	5	25	25
7	PO ₄ ³⁻	mg/l	0,1	0,1	-	-	-	-
8	Colifor	bacteria/100ml	2.000	2.500	5.000	-	-	-

Table 1. Results of wastewater quality analysis from Leakage Treatment Station of the Calcium CBL in December 2017

Parameter	Rate not reached VNC (%) (number of unsatisfactory samples / total number of observation samples)	
	Upstream	Downstream
Physical (pH, DO, TSS)	5,6%	5,6%
Organic (COD, BOD ₅ (20°C))	(1/18)	(1/18)
Nutrition (NH ₄ -N, Phosphat (PO ₄ ³⁻ tinh thep P))	0%	0%
Microbiology (Coliform)	(0/12)	(0/12)
Total	50,0%	50,0%
(08 thông số)	(6/12)	(6/12)
	33,3%	33,3%
	(2/6)	(2/6)
	18,8%	18,8%
	(9/48)	(9/48)

Table 2. Results of surface water quality analysis around Trang Cat Landfill

PROPOSED SOLUTIONS

Expediently design and construct the rain water collection system.

Recalculate leachate generated in Trang Cat Landfill and actual capacity needed.

Propose the addition of duplicate wastewater lines be suitable.

Invest funds.

CONCLUSION

The output water of the wastewater treatment system has reached the permitted standard, safe and suitable for use in daily life as well as in the production activities.

The surface water in the heavily contaminated landfill site needs treatment.

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