



Iowa Department of Natural Resources  
 Wastewater Section  
 Construction Permit Application  
**SCHEDULE K2, Aerated Pond**

DNR USE ONLY  
 Project No. \_\_\_\_\_  
 Permit No. \_\_\_\_\_

Date Prepared _____	Project Identity _____
Date Revised _____	

1. Design Basis	ADW	AWW-30	MWW	PHWW	
Flow, MGD	_____	_____	_____	_____	
BOD <sub>5</sub> , #/day	_____	_____	_____	_____	
2. Number of soil borings taken	_____ Data included in the _____				
High groundwater elevation (MSL)	_____				
3. Top of dike elevation (MSL)	_____ ft.		100 year flood elevation (MSL) _____ ft.		
4. Pond Data	Cell No. 1	Cell No. 2	Cell No. 3	Cell No. 4	Total
Surface area at maximum depth (A)	_____	_____	_____	_____	_____
Maximum operation depth (ft)	_____	_____	_____	_____	_____
Minimum operation depth (ft)	_____	_____	_____	_____	_____
Effective storage volume (MG)	_____	_____	_____	_____	_____
Effective detention time (days)	_____	_____	_____	_____	_____
Air Requirements					
Provided (ft <sup>3</sup> /#BOD)	_____	_____	_____	_____	_____
Provided (#O <sub>2</sub> /#BOD)	_____	_____	_____	_____	_____
Provided (#O <sub>2</sub> /#BOD)	_____	_____	_____	_____	_____
Minimum DO level (mg/l)	_____	_____	_____	_____	_____
Freeboard at maximum depth (ft)	_____	_____	_____	_____	_____
Top width of dike (ft)	_____	_____	_____	_____	_____
Inner embankment slope (H/V)	_____	_____	_____	_____	_____
Outer embankment slope (H/V)	_____	_____	_____	_____	_____
Type of inlet	_____	_____	_____	_____	_____
Top drawoff level (ft)	_____	_____	_____	_____	_____
Middle drawoff level (ft)	_____	_____	_____	_____	_____
Bottom drawoff level (ft)	_____	_____	_____	_____	_____
5. Aeration Equipment: Design Air Temperature	_____ °F to _____ °F				
Type	_____ Manufacturer & Model _____				
Number of Units	_____ HP or CFM/unit	Total HP of CFM _____			
K value	_____ /day at design temperature _____ °C				
Is a layout of the aeration system given on Schedule H1?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
7. Method of raw flow diversion to cells	_____				
8. Method of interconnection of cells	_____				
9. Provision to prevent drawoff of floating solids	_____				
10. Method of sampling	_____				
11. Type of flow measurement	Influent	_____ Effluent			_____
12. Fence height	_____	Number of strands of barbed wire	Top	Bottom	_____
13. Number of warning signs	_____	Location _____			
14. Will pond be pre-filled to two-ft. level?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
15. Maximum allowable leakage rate	_____ in/day				
Method of testing leakage rate	_____				
16. Are specifications included for:	a. Seeding	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
	b. Soil sterilization	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
	c. Pond bottom uniformity	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
	d. Pond sealing	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
	e. Erosion protection	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
17. Is service bypass provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No		Discharge to _____		