



IOWA DEPARTMENT OF NATURAL RESOURCES
 WATER SUPPLY ENGINEERING SECTION
CONSTRUCTION PERMIT APPLICATION
 SCHEDULE-16c, Filtration and Mechanical

Date Prepared _____	Project Name/Description _____
Date Revised _____	

1. Design Basis:

	Average	Maximum
Flow to Unit (gpd)		
Suspended Solids to Unit (lbs/day)		

2. Wastewater Sand Filters or Sludge Drying Beds: N/A

- a. Number of filters: _____ Total filter surface area: _____ ft²
- b. Number of sludge drying beds: _____ Total bed area: _____ ft²
- c. Maximum water depth over media: _____ ft.
- d. Method of freeze protection: _____ Spec. Page No.: _____
- e. Type of unit underdrain: _____ Spec. Page No.: _____
- f. Type of effluent flow measurement: _____ Spec. Page No.: _____
- g. Method of effluent sampling: _____ Spec. Page No.: _____

3. Wastewater Sand Filters: N/A

Media Data	Layer 1	Layer 2	Layer 3	Layer 4
Type of Media				
Depth (inches)				
Effective size (mm)				
Uniformity Coefficient				

4. Mechanical dewatering: N/A

- a. Type of dewatering unit: _____
- b. Has a pilot study on the water plant waste been conducted? Yes No
- If yes**, attach a copy of the pilot plant study findings; **If no**, attach justification for not conducting a pilot plant study, including test results from similar types of sludge:

Design Data	Unit # 1	Unit # 2	Unit # 3
Capacity (lbs. solids/hour)			
Capacity (gallons/hr)			

- c. Will polymer or precoat be used? Yes No
 If yes, identify: _____
- d. To where is the mechanical dewatering unit liquid effluent discharged?

 If returned to the raw water entering the water treatment plant, has provision been made to bypass this liquid effluent to the sanitary sewer? Yes No
- e. Is the sludge discharged to a sludge storage facility prior to being dewatered? Yes No
If yes, how large a facility is provided? _____ gallons
If no, what provisions have been made to dispose of sludge daily?
