Iowa Department of Natural Resources
Wastewater Section
Construction Permit Application
SCHEDULE R1, Sludge Digestion & Holding

DNR USE ONLY
Project No. _____
Permit No. _____

Date Prepared _____ Date Revised _____	Project Identity

1. Sludge Drying Beds

Parameter	Unit 1	Unit 2	Unit 3
Covered or Open			
Effective Area (ft^2)			
Area Per Capita (ft^2)			
Gravel Depth (in.)			
Sand Depth (in.			
Underdrain Size (in.)			

Freeboard above sand _____ in Are splash pads provided ☐ Yes ☐ No

Are concrete truck tracks provided? ☐ Yes ☐ No Spacing (C-C) _____ ft

Distance between high groundwater and underdrain system _____

Drainage from bed discharged to _____

2. Sludge Filters

Type and volume of sludge to be handled _____

Number of filters _____ Size _____ Total Area _____

Capacity (#/ft^2/hr) _____ Total Capacity _____ #/hr

Chemicals used _____

Method of conditioning _____

Filtrate discharged to _____

3. Sludge Lagoon

Number of lagoons _____ Dimensions _____

Total volume of lagoons _____ Life expectancy (yrs) _____ High groundwater elevation (MSL) _____

Provide distance to the nearest water well _____ ft

Provisions to protect groundwater _____

Method for cleaning _____

4. Final Sludge Disposal

_____ Landfill or burial: *identify site _____

_____ Low rate land application* _____ Incineration

_____ High rate land application* _____ Pyrolysis/wet air oxidation

_____ Other (identify) _____

a. Type of sludge (identify last treatment process) _____

b. Method of handling _____

c. Available equipment _____

d. Volume and frequency of disposal _____

e. Percentage volatile solids in raw sludge _____

*If landfilling, burial or high rate land application of sludge is proposed, an additional permit from the Iowa DNR will be required. Complete and submit DNR Form 43- Application for Sanitary Disposal Project Permit. If low rate land application of municipal sewage is proposed, Schedules R2A and R2B must be submitted for this project.