WRA Grease Interceptor Sizing Proposal

Date: M/D/YY
Facility Name: Restaurant Generic
Address: 123 Generic Street City: Des Moines Metropolitan City
Contact Name and Title: General Engineering Group
Phone: (515) 555-5555 Email: ProjectManager@generalengineering.com
Contact Address (if different): 123 Engineering Road, Des Moines, IA
Plumbing Contractor: XYZ Plumbing Company

Type of Food Service Establishment (FSE)
- [x] Full Service Restaurant  [ ] Assisted Living / Nursing Facility  [ ] Other: __________
- [ ] Single Service Restaurant  [ ] Grocery  [ ] Church  [ ] School / Daycare

Grease Interceptor Sizing – Must not be less than the Ordinance minimum of 1000 gallons.

1. Peak Meals per Hour (if unknown use formula below)
   - Seating Capacity or Occupancy of FSE* × Meal Factor** = Peak Meals per Hour
   - * Church: include all area(s) used for meal service
   - * Assisted Living / Nursing Facility: equal to max number of residents (per State license)
   - ** Meal Factor: 1.3 (for 45-minute meal) or 1.0 (for intermittent use FSE)

     
     | Seating Capacity or Occupancy of FSE | Meal Factor | Peak Meals per Hour |
     |--------------------------------------|-------------|---------------------|
     | 50                                   | 1.3         | 65                  |

2. Waste Flow Rate
   - a. Commercial, equipped kitchen with dishwasher & one garbage disposal* = 7
   - b. Commercial, equipped kitchen with dishwasher, no garbage disposal = 6
   - c. Commercial, equipped kitchen with no dishwasher, one garbage disposal* = 6
   - d. Commercial, equipped kitchen with no dishwasher, no garbage disposal = 5
   - e. Single service kitchen** = 2
     - * Each additional garbage disposal, add one (1) gallon
     - ** Single service kitchen = no garbage disposal, no dishwasher and all service is single use

3. Retention Time
   - a. Commercial kitchen = 2.5
   - b. Single service kitchen = 1.5

4. Storage Factor
   - a. Commercial kitchen up to 8 hours of operation = 1
   - b. Commercial kitchen up to 12 hours of operation = 1.5
   - c. Commercial kitchen up to 16 hours of operation = 2
   - d. Commercial kitchen up to 20 hours of operation = 2.5
   - e. Commercial kitchen up to 24 hours of operation = 3
   - f. Single service kitchen = 1.5

   Peak Meals per Hour × Waste Flow Rate × Retention Time × Storage Factor = Calculated GI Size

<table>
<thead>
<tr>
<th>Peak Meals per Hour</th>
<th>Waste Flow Rate</th>
<th>Retention Time</th>
<th>Storage Factor</th>
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<tbody>
<tr>
<td>65</td>
<td>5</td>
<td>2.5</td>
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   Calculated GI Size = 1,625

Proposed installation is as follows: Install one 2,000-gallon grease interceptor

The following must be submitted for an official sizing request:
- [ ] Completed Grease Interceptor Sizing Proposal (completed by a professional engineer or licensed plumber)
- [ ] Kitchen plumbing blueprint
- [ ] Kitchen equipment list
- [ ] FSE site plan showing seating capacity OR square feet / occupancy
- [ ] Verification of current Grease Interceptor size by a professional engineer or licensed plumber (if applicable)

Submit to: Jason Merk, WRA FOG Program (515) 323-8063 (fax) OR jcmerk@dmgov.org
Des Moines Metropolitan Wastewater Reclamation Authority
3000 Vandalia Road, Des Moines, IA 50317, (515) 323-8000