

Overview of City of Marietta Pretreatment Program

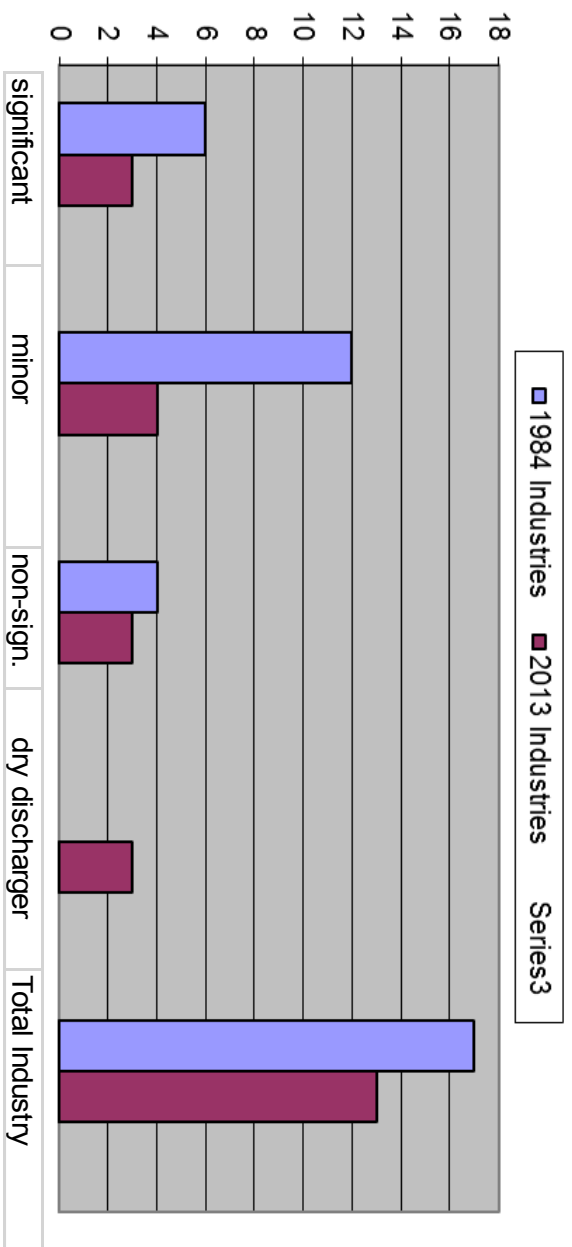


Marietta POTW Design Criteria

- 3.34 MGD ADF
- 17,940 people design pop
- 6,996 lb/day BOD
- 4,358 lb/day TSS
- 510 lb/day NH₃-N
- 8.2 MGD peak
- 41,713 person Design PE
- 4,290 lb/day BOD for industrial
- 799 lb/day TSS for industrial
- 183 lb/day NH₃-N for industrial

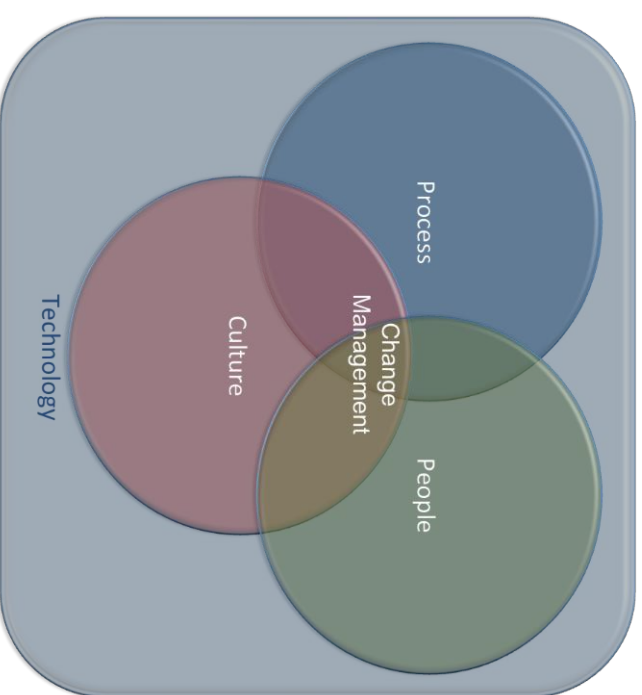
22% of the 1984 design was allocated to industrial

1984 pretreatment industrial users VS. 2013 industrial users



Cultural Changes Began Occurring in 1990's

- City began losing industry
- Increase in food service
- Increase in SSO's and sewer line plugging
- NPDES permit limitation violation for oil and grease



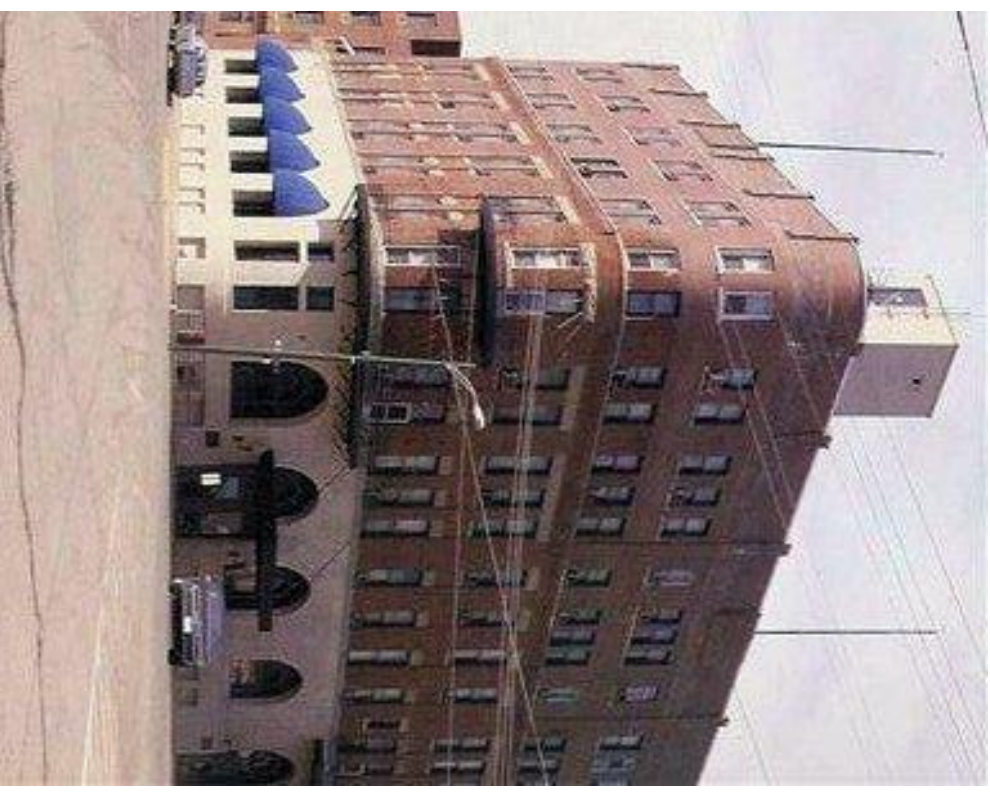
Ohio EPA Intervention

- Oil and grease removal technology at treatment plant.
- Point source removal



Point Service Removal Alternative chosen by City

- City modified existing ordinance to include Food Service Facilities under current approved Pretreatment Program



Results

Advantages

- City is in compliance with NPDES permit
- Sanitary sewer main plugs dramatically decrease
- SSO's dramatically reduce
- Annual invoice backcharges generate revenue to offset cost

Challenges

- Business owners in noncompliance
- Food Service Facilities create internal political issues
- To make the case for enforcement

Permit Process

- All facilities referred to Washington Co. Building Permit Office
- County Checklist of all procedures required for a pretreatment permit.
- Service waste questionnaires
- Scheduled meetings



**DOCUMENT!!!
DOCUMENT!!!
DOCUMENT!!!**



Questionnaire Packet

- Industrial Service Waste Questionnaire
- Commercial Service Waste Questionnaire
- Food Service Facility Service Waste Questionnaire



Food Service Facility Service Waste Questionnaire

- Section A: General Info
- Section B: Food Service Info
- Section C: Water Use Info
- Section D: Sewer Connection and Discharge Info
- Section E: Verification



FOOD SERVICE FACILITY SERVICE WASTE QUESTIONNAIRE (ONE QUESTIONNAIRE REQUIRED PER FACILITY)

GENERAL INSTRUCTIONS

Please type or print in ink when filling out questionnaire. All questions are to be completed in Section A through E. Where a question does not apply, a "N/A" response should be entered.

SECTION A. GENERAL INFORMATION

1. Company Name: _____
2. Mailing Address: _____
3. Facility Name/ Physical Address: _____
4. Facility Telephone & Facsimile #: _____

SECTION B. FOOD SERVICE INFORMATION

1. Type of food prepared at this site: Fried / Baked / Grilled / Other _____
2. Fixture unit counts: _____ (Fixture units = plumbing fixtures that drain through the grease trap which includes sinks, counters, dishwashers, garbage disposals, and floor drains)
3. Kitchen equipment types: Fryers / wok stoves / broilers / ovens _____
Other _____
4. Seating Capacity: _____ [If seating capacity is unknown, indicate the dining room (Area = length X Width)]
5. Turnover Rate: _____ (meals served per server per hour generally assumed to be about 2; this number can be adjusted up for heavy use restaurants)
6. Estimated number of meals served per day: _____
7. Basic food served: _____

SECTION C. WATER USE INFORMATION

1. List grease trap or interceptor water uses: _____
2. a.) Are other sources of water used (well, spring, river, etc.)? Yes / No _____
b.) If Yes, list sources and usage: _____

Food Service Facility (FSF) Permitting Criteria

- Weighting Factor
- Seating
- Turnover Rate
- Water usage-based on meals served

Number of Seats	Factor
0-50	1.0
51-100	1.5
>100	2.0

Water usage / Wastewater volume: - based on meals served

Number of meals served	Factor
0-50	1.0
51-150	1.5
151-250	2.0
251-350	2.5
>350	3.0

JOE'S BUFFET

SWQ Information

- Example: basic $1 + 0.5 \times 6$ (grease producing pieces of equipment installed) = a factor of 4
- 125 seats = a factor of 2
- Turnover rate = 2
- 300 meals served/day = 2.5
- Factors to determine Classification Level
EX: $(4+2+2+2.5 = 10.5)$



Restaurant Classification Level I

- Level I: FSF's that have a factor of 5 or less



Restaurant Classification Level II

- Level II: FSF's that have a factor of 5.5-10



Restaurant Classification

Level III

- Level III: FSF's that have a factor of >10

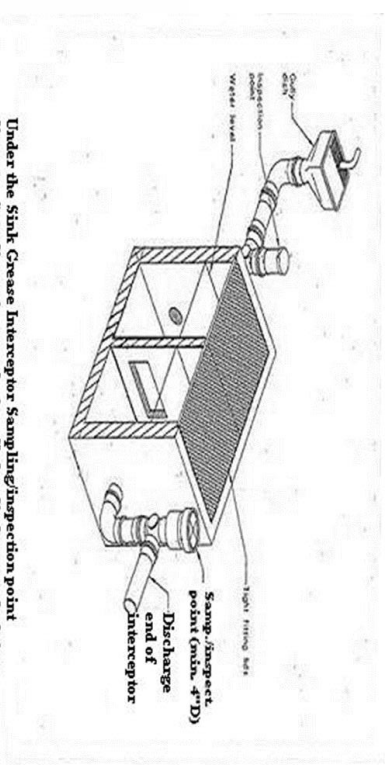
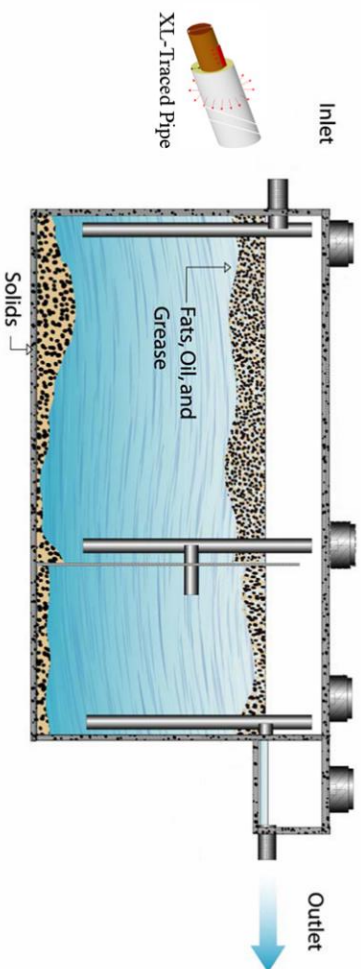


FSF Discharge Permit

- Page 1: Business Info
- Page 2: Cleaning and Reporting Requirements
- Page 3: General Discharge Prohibitions
- Page 4: Inspection and Sampling & Record Retention
- Page 5 & 6: Signatory Requirements, Enforcement Response Plan and Show Cause Hearing
- Self-monitoring Report form attached to permit.



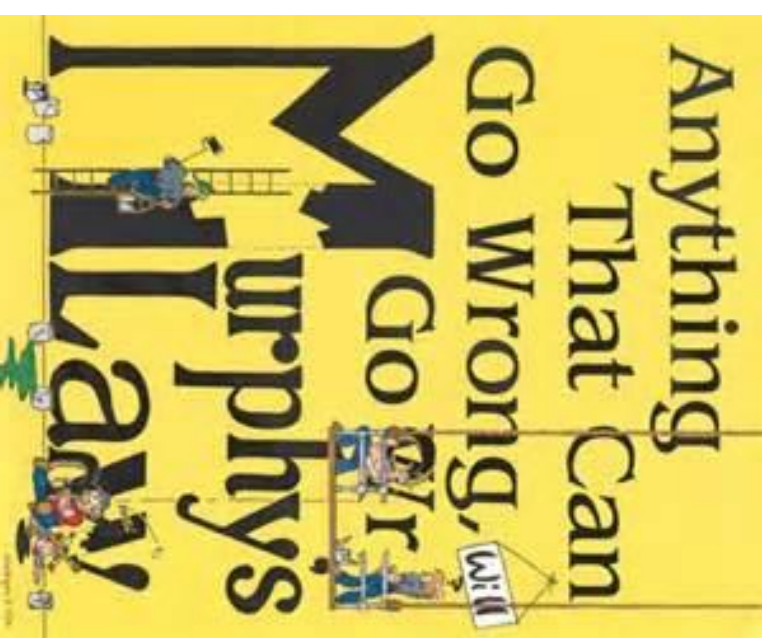
Inside/Outside Interceptors



Under the Sink Grease Interceptor Sampling/inspection point diagram. Sampling point must be installed at discharge end of pipe.

Notice of Violation Order to Cure

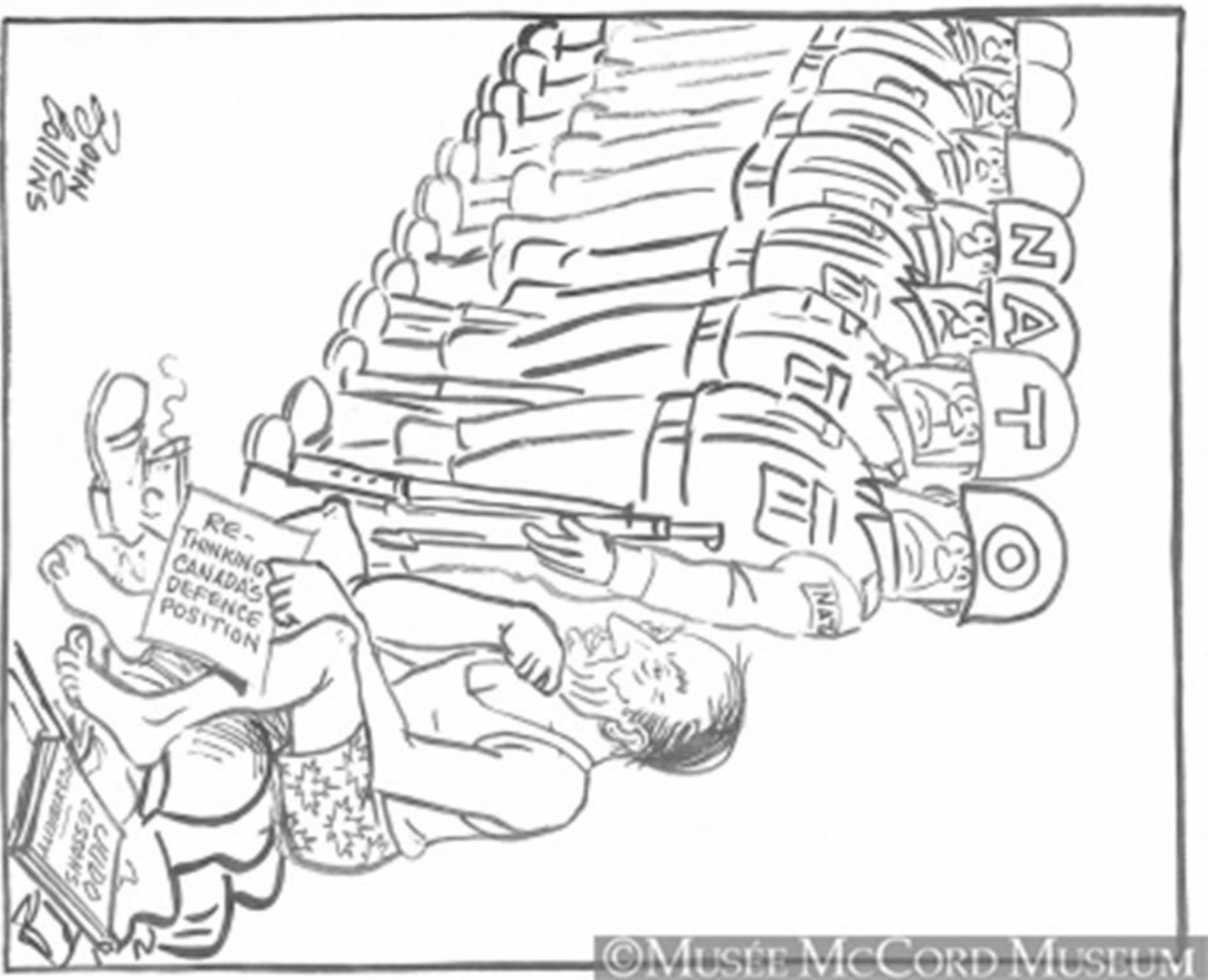
- Business; Name, Address, Date, and Permit Number
- Deficiency revealed
- Re-inspection to confirm compliance with City's Ordinances.



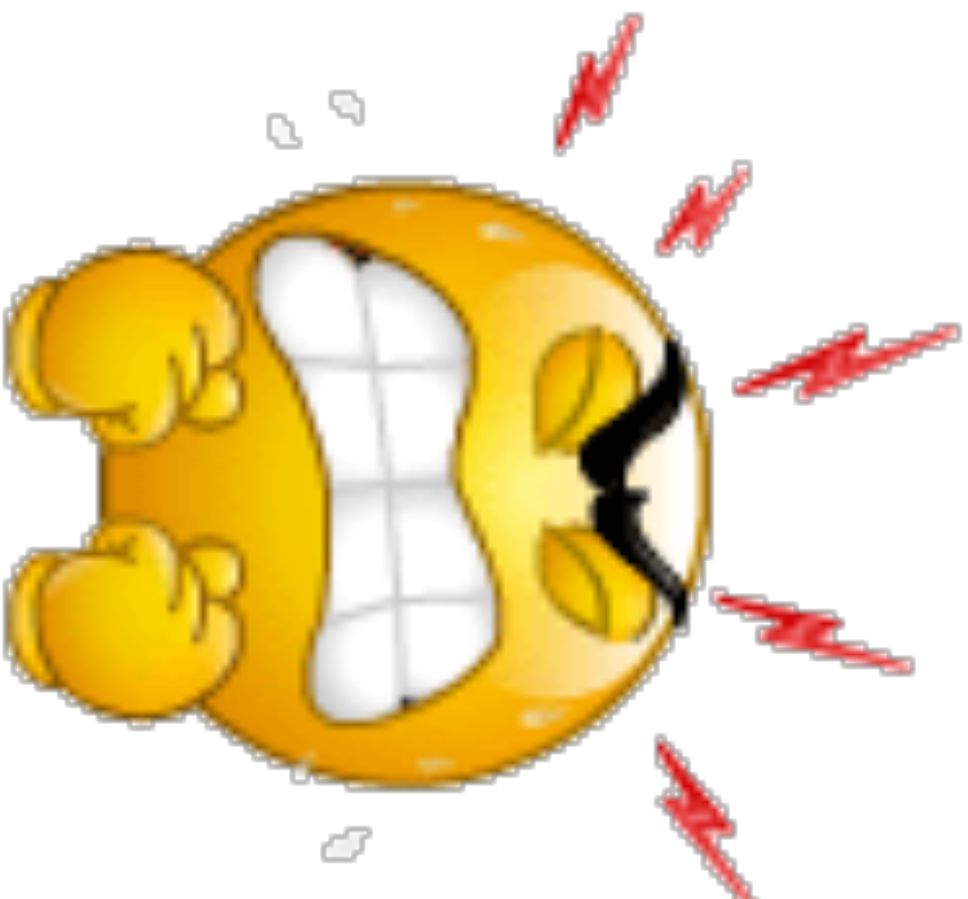
Enforcement Response Plan



Problems?????



OF COURSE!!!





























FROM SERVING AREA COMP. SINK - OTHER THE SMOONTRUB & PIZZA 3/12/14



INTERCEPTOR UNDER SINK IN KITCHEN - OVER THE MOON P.B. & PIZZA
8/12/14





Questions ????

Contact Info:

Steve Elliott, Wastewater Superintendent

Christy King, Chemist/Pretreatment Coordinator

City of Marietta WWTP

440 East Eighth St.

Marietta, OH 45750

Telephone: 740-373-3858

Fax: 740-373-8214

Or at steveelliott@mariettaoh.net

christineking@mariettaoh.net

