

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY
INDUSTRIAL PRETREATMENT PROGRAM

Fats, Oil and Grease Policy

**(Modified to comply with plumbing code
as of May 2014)**

Albuquerque Bernalillo County Water Utility Authority

Fats, Oils and Grease Policy

May 2014

I. Purpose

Fats, Oils, and Grease (FOG) are primarily generated from food service establishments (FSEs) and can cause blockages and overflows in the collection system. Any sanitary sewer overflow (SSO) is a violation of the Albuquerque Bernalillo County Water Utility Authority's (Water Authority) National Pollutant Discharge Elimination System (NPDES) permit (NM0022250). This policy has been developed to work in conjunction with the Water Authority Sewer Use and Wastewater Control Ordinance (Ordinance or SUO) to reduce the rate of SSOs in the collection system and decrease FOG loading at the Southside Water Reclamation Plant (SWRP). The purpose of this policy is to let FOG dischargers such as Food Service Establishments and waste haulers know what is expected of them, and to let the public know what the Water Authority is doing to mitigate FOG.

II. Legal Authority

Control of discharges into the collection system is part of a broader Pretreatment Program dedicated to regulate discharges of non-domestic wastes. The Water Authority's Pretreatment Program is required under the Clean Water Act and approved by the Environmental Protection Agency (EPA). In 2005, the Water Authority Board amended the Sewer Use and Wastewater Control Ordinance to require FSEs to install and maintain grease removal systems (GRSs). The Ordinance allows the Pretreatment Program to set Best Management Practices (BMPs). Not adhering to BMPs is a violation of the Ordinance which can be enforced according to the EPA approved Enforcement Response Plan (ERP). Compliance with all Water Authority Ordinances is a condition of service.

III. Process

To ensure compliance with the FOG requirements of the SUO, the Water Authority will:

- Maintain a list of FSEs and periodically inspect to verify a GRS is installed and maintained.
- Coordinate with others to search for new FSEs and add to the list of facilities to be inspected.
- Maintain inspection data in an electronic database.
- Take enforcement actions for violations of FOG requirements with priority on FSEs causing repeat SSOs.

A process model is included as Attachment 1.

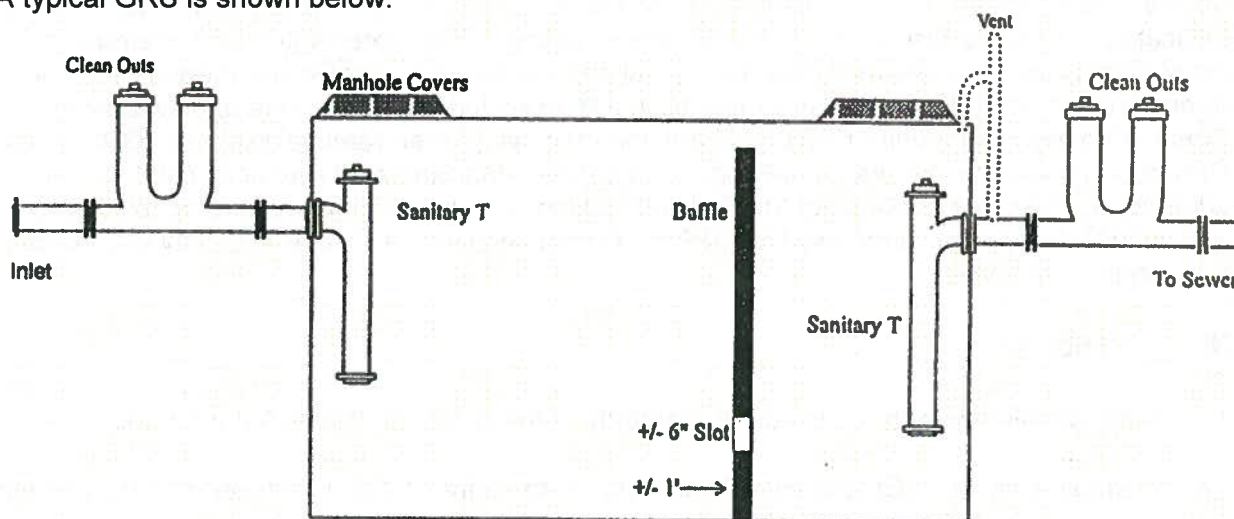
IV. Specifications

All FSEs are required to install GRSs unless the Water Authority has issued an exemption. Exemptions may be given to any FSE that doesn't generate FOG (i.e. does not wash dishes or food preparation equipment).

If a GRS is required, all drains from the dishwashing areas shall be connected to the GRS to ensure proper grease handling and removal. Fixtures to be connected to a grease interceptor include, but are not limited to: scullery sinks, pot and pan sinks, soup kettles, and floor drains located in areas where grease-containing materials may exist. Sanitary facilities such as bathrooms containing domestic waste shall not discharge to the GRS. Commercial dishwashers shall not be connected to a GRS.

All GRSs must be sized according to the plumbing code of the code enforcement authority, either the City of Albuquerque (COA) or Bernalillo County (BernCo). Grease Removal Systems must include a means of separating FOG from water. This includes but is not limited to baffle walls, inlet tees, and outlet tees. All tees and baffles shall be constructed of durable, non-flexing materials and securely attached to the sides of the GRS.

A typical GRS is shown below:



V. Maintenance and Recordkeeping

A. General

The Ordinance requires that the GRS be properly maintained. The FOG management equipment shall be continuously maintained in satisfactory and effective operation at the FSE owner's expense. Proper maintenance includes pumping before the total amount of floatable grease and solids constitute 25% of the vertical water column of the trap as measured in the field. Adequate maintenance also includes maintaining baffles and tees to prevent corrosion.

Any laboratory analysis of wastewater effluent from FOG management equipment in excess of the Ordinance limit for FOG will warrant increased frequency of cleaning of FOG maintenance equipment. Should any FSE fail to meet the limit for FOG within the wastewater effluent (200 mg/L) or be identified as a potential source of repeated grease buildup within the wastewater collection system, the Water Authority may require the FSE to replace any or all FOG management equipment. The Water Authority may also set mandatory pumping frequencies. If FOG management equipment is not currently in use, the Water Authority may require the installation of FOG management equipment to comply with Water Authority FOG wastewater limits.

All maintenance and pumping activity records, including grease disposal manifests, on the GRS must be kept onsite for a period of three (3) years. Failure to keep manifests and other records onsite may result in a violation.

Chemical and/or biological additives that cause or could cause fats, oils, and/or grease fractions to be released from the FOG management equipment are not permitted without the written approval of the Water Authority. The Water Authority does not endorse chemical or biological treatment, as these materials could potentially cause accumulated FOG material to liquefy only to coagulate elsewhere in the wastewater collection system.

Heat should not be used to liquefy FOG.

B. Self-Cleaners

For FSEs with GRSs retaining 40 gallons or less, the owners or operators may clean their own small GRS. All GRSs retaining more than 40 gallons should be cleaned by pumping companies. To properly self-clean a GRS, the FSE must:

1. Remove all floatable solids and place in the trash.
2. Pump the water in the trap using a shop vacuum or similar device.

3. Remove the solids at the bottom and place in the trash.
4. Pump the water from the shop vacuum back through the interceptor.

The FSE management should keep a log of self-cleaning activities that includes date, time, and the initials of the person performing cleaning. During cleaning, FSE management should evaluate and note on the log the condition of the trap, including corrosion and the functionality of the major parts. The cleaning log for the past three (3) years shall be kept onsite.

VI. Best Management Practices

In order to reduce FOG entering the sanitary sewer, FSEs are required to implement the following BMPs:

1. Completely pump-out or self-clean the GRS at least every six (6) months or when the vertical column of floating grease and solids is greater than 25% of the height of the water in the trap.
2. Periodically inspect GRSs and make repairs to tees and baffles.
3. Scrape plates and receptacles into the trash prior to washing rather than washing solid grease and food down the drain.
4. Dispose of any spilled or waste food material into the trash.
5. Eliminate the use of emulsifying additives such as degreasers and enzymes in the GRS or grease interceptor. Although emulsifying agents may serve to keep interior drain lines open, the oil and grease problem is simply transferred to the mainline.
6. Pour all liquid oil and grease into a grease waste container where it can be recycled or disposed of properly.
7. Capture oil and grease wastes from cleaning of mats and ventilation/exhaust hoods. Dispose of these wastes in the trash or waste oil container.
8. Use screens over drains to capture waste food materials. Dispose of this waste in the trash.
9. Disconnect garbage disposals.

10. If a dishwasher is present, use it only for sanitizing purposes. The dishwasher must bypass the GRS and flow directly to the wastewater mainline.
11. Observe the pumping contractor to ensure the GRS is properly cleaned and pumped.
12. Maintain accessibility to the GRS. Do not landscape or pave over the lids to the GRS. Kitchen equipment should not be placed so as to obstruct the inspection of interior GRSs. FSEs must provide the necessary equipment such as wrenches, pull bars, and screwdrivers to inspect the GRS.
13. For small, interior GRSs, permanently install a properly sized flow restrictor and air relief valve on the incoming plumbing to the GRS. The restrictor maintains an acceptable flow of wastewater to the trap. The air valve aids in grease and oil removal.

VII. Pumper Requirements

A. Complete Evacuation

Companies that pump GRSs are required to completely remove the entire contents of the GRS. All manholes and lids must be removed and all chambers of the GRS must be pumped. Decanting or discharging of removed wastewater and/or associated material back into a GRS or other part of the collection system is prohibited.

B. Manifests

Pumping companies must provide FSEs with manifests. Manifests must contain pertinent pump out information such as date, time, volume pumped, and general condition of GRS.

C. Prohibitions

All companies that pump GRS wastes must dispose of the pumped waste in accordance with the Ordinance.

The SWRP will not accept loads that contain unprocessed GRS waste. Blending GRS wastes with a load of septage is not allowed, and is a violation of the Hauled Wastewater Discharge Permit. GRS waste that has been processed to remove Oil and Grease may be discharged as long as the levels of Oil and Grease are below the limits specified in the Ordinance. Discharges of FOG above the specified limits in the Ordinance will be violations. Pumping companies that violate the Ordinance via concentration limits or by discharging unprocessed GRS waste will be subject to enforcement. Enforcement actions will be according to the EPA approved Enforcement Response Plan and may include fees and/or revocation of hauled waste discharge permit.

All trucks may be inspected and monitored at any time on Water Authority property.

VIII. Inspections

Water Authority Pretreatment staff will routinely perform FOG inspections at FSEs. These inspections may be assigned or the result of an SSO. Most inspections will be conducted by Monitoring Technicians. The Monitoring Technicians are New Mexico Wastewater Operator Level III. The Water Authority will endeavor to inspect each FSE a minimum of once every three (3) years or less.

Inspectors will determine if FSEs meet the requirements of the Sewer Use and Wastewater Control Ordinance as well as this policy. Technicians will note the presence and size of the GRS, the condition of the interior of the GRS, and whether the trap is overloaded. If the GRS is overloaded, the Technician will use a "sludge judge" or other tool to assess the amount of floatable grease/sand/solids in the GRS. The Technician will examine manifests of GRS pumping and determine if the pumping frequency is adequate for the amount of grease in the interceptor. If the Technician suspects that the correct plumbing fixtures are not connected to a grease interceptor, the Technician may perform a dye test. Typically BMP informative flyers are handed out to FSE managers at the end of each inspection.

Typically FOG inspections will not take place during the lunch hours of 11:00am – 1:30pm or dinner hours of 5:30pm – 7:00pm, however unobtrusive observation of BMPs may occur at any time.

The Water Authority, at any time, may take grab samples and conduct laboratory analysis of the wastewater discharged from any FOG management equipment to assure compliance with Water Authority local limits for FOG in wastewater (200 mg/L). Water Authority staff may visually inspect wastewater within a manhole or wastewater pipe to determine the need for increased frequency of cleaning of the GRS.

IX. Enforcement

A. Fats, Oils, and Grease Violations

Failure by a FSE to install an adequately sized GRS is considered a violation of the SUO. After becoming aware of a violation, the Industrial Pretreatment Engineer will issue a written Notice of Violation (NOV) via certified letter describing the violation and the actions required of the FSE as a result of the violation. The NOV will require the FSE to submit, within 15 days of receipt of the notice, a compliance schedule with the date the FSE will have a GRS installed, or proof that a GRS has been installed. Typically, compliance must be achieved within one (1) year of the date of the initial NOV.

Grease Removal Systems must be cleaned at least once every six (6) months or whenever the combined thickness of the floating greases and settled solids is equal to, or greater than, 25 percent of the total liquid depth in the GRS (25 Percent Rule).

Failure to clean the GRS at least every six (6) months or when required by the 25 Percent Rule is a violation. Failure by a FSE to maintain a GRS is a violation of the SUO. After becoming aware of a violation, the Industrial Pretreatment Engineer will issue a written NOV describing the violation and the actions required of the FSE as a result of the violation. The NOV will require the FSE to submit, within fifteen (15) days of receipt of the notice, manifests or other proof that the GRS has been cleaned.

If there is no reply to the initial NOV, a second NOV will be sent with identical requirements. An Administrative Assessment will be applied to the FSE's water bill each month until a compliance schedule is submitted, or the GRS is pumped. If there is no reply to the second NOV, a third NOV will be sent, with identical requirements. If there is no reply to the third NOV, water or sewer service may be terminated.

B. Hauled Wastewater Violations

Within five (5) days of becoming aware of a violation of the hauled wastewater provisions of the SUO, the Industrial Pretreatment Engineer will issue a written NOV describing the violation and the actions required of the Hauler as a result of the violation. The NOV will require the Hauler to submit, within 15 days of receipt of the notice, details of the cause of the violation and what action has been or will be taken to correct the problem.

If the corrective actions are adequate, the Industrial Pretreatment Engineer will notify the Hauler in writing that the NOV is closed. If no reply is received or corrective actions are not adequate, the Industrial Pretreatment Engineer will assess administrative fees according to the Enforcement Response Plan.

Multiple violations by a single hauler or hauler company will result in increased enforcement measures.

The Water Authority will charge Haulers to recover actual expenses incurred by the Water Authority as a result of discharge violations. In addition, Administrative Assessments may be imposed for excessive or frequent violations in proportion to the magnitude and duration of the violations. The schedule of assessments used will be the same as those used for industrial discharge violations.

The Hauler will be required to reimburse the Water Authority for all costs associated with discharge violations including but not limited to sample collection, materials, and analysis required. Multiple violations by a single hauler or hauler company may result in an increasing schedule of Administrative Assessments.

X. Sanitary Sewer Overflows

Pretreatment Program staff coordinates with the Water Authority Collections Section to reduce SSOs. All SSOs are reported to the Collections Section via Water Authority dispatch or Water Control Center. A crew is then dispatched to the SSO for cleanup and remediation. The Collections staff fills out a Conditions Report and Corrective Maintenance report. If grease is

noted in large quantities during cleaning, the Collection supervisor will typically notify the Pretreatment Program. Collections staff will also notify the Pretreatment Program of large grease deposits encountered during closed-circuit television inspection of wastewater lines.

After being notified by the Collections Section of a grease-caused SSO, the Pretreatment Program begins an investigation. The investigation involves visiting FSEs in the area and inspecting GRSs and manifests. Pretreatment may also request additional closed-circuit television inspection of the line to help determine a cause. If a violation is noted, a NOV will be prepared. FSEs will be billed for the cost of the cleanup as well as other fines if it is found that they have contributed to a SSO. If a grease-caused overflow occurs in a primarily residential area, leaflets will be distributed to homes informing them of BMPs to prevent grease from entering the drain.

The Pretreatment Program and the Collections Section have formed a study team to investigate SSOs. The mission statement of the SSO study team is:

“The SSO Team will work interdepartmentally to study, analyze, and determine causes of previous SSOs to mitigate future SSOs in our Collection System.”

Findings of the SSO study team will be used to target enforcement of FSEs. Locations with repeat SSOs will be identified by the team and investigated.

XI. Identifying New Sources

The Pretreatment Program keeps track of FSEs in a dedicated database called LinkoFOG. As new restaurants open, critical information is input into LinkoFOG. The Pretreatment Program will update the LinkoFOG database with new FSE information on an annual basis.

The Water Authority will set-up a task force which will be comprised of representatives of the Pretreatment Program, Water Authority Collections Section, COA Environmental Health, COA Planning and Coding, BernCo Environmental Health, BernCo Planning and Coding, the Village of Los Ranchos, the Village of Corrales, Kirtland Air Force Base, local plumbers union, and the New Mexico Restaurant Association. The task force will enable all parties to comment on FOG related issues and to help reduce SSOs. The task force will meet semiannually.

A. City of Albuquerque

The Pretreatment Program will access business licenses issued to new FSEs by contacting the Planning Department of the COA on a regular basis. The COA Environmental Health Department performs inspections of FSEs, and is a good resource to find FSEs that have recently opened.

B. Bernalillo County

Similar to the COA, the Pretreatment Program will contact the Bernalillo County Zoning, Building, Planning & Environmental Health Departments to obtain data on new FSEs that are outside of the COA but still within the Water Authority's service area.

C. Internal Resources

When a new water account is opened or when an account is transferred to a new business, the Customer Services Division will check to see if the new business is a FSE. If so, an email will be sent to the Pretreatment Program.

During the course of routine FSE inspections, Water Authority Technicians may notice new FSEs. When this occurs, the Technician performs an inspection at the FSE. When the inspection data is entered into LinkoFOG, the new businesses information is also added.

Fats, Oils, and Grease (FOG) Process Model (Attachment 1)

