

Outreach and Education Plan for Community-Based Social Marketing Pilot Project on Fats, Oils, and Grease Disposal in Rental Properties

Texas Commission of Environmental Quality (TCEQ) Project 582-21-10087

Prepared by: Houston-Galveston Area Council (H-GAC)

Funding provided by the TCEQ

Submitted: May 31, 2022



Contents

- Introduction 3
 - Identification of Barriers 3
 - Proposed Outreach and Education Strategies 4
- Communication Materials and Methods 4
 - Education: Digital and Print Materials 4
 - Prompts: Print and Other Materials 6
 - Complementary Outreach 7
- Performance Metrics 7

Introduction

In support of the Coastal Communities initiative, the Houston-Galveston Area Council (H-GAC) convened a workgroup to help pilot a community-based social marketing (CBSM)-inspired project to develop outreach strategies and messaging for proper disposal of fats, oils, and grease (FOG). This campaign specifically targets residents in rental properties. CBSM is an approach to designing outreach strategies and campaigns that are more likely to result in audience behavior change, as introduced by Doug McKenzie-Mohr in his 2011 book, "Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing."

Improper disposal of FOG by residents of apartment complexes and other rental properties was repeatedly identified as a concern by community stakeholders and public works staff in both one-on-one meetings for the Coastal Communities project and related partner projects. Improper FOG disposal can clog pipes or cause backups and overflows in rental properties and further down in the city's sanitary sewer lines. Improper FOG disposal and sewer backups are not limited to renters and rental properties. Although FOG outreach campaigns are common, campaigns often target or use messaging that is more relevant to homeowners and may not resonate as effectively with renters. To more effectively reach and educate renters on the consequences of improper FOG disposal and the easy steps to take to avoid the consequences, the pilot project workgroup used CBSM-inspired strategies to identify potential barriers that might be specific to renters and create messaging tailored to help overcome the barriers.

Identification of Barriers

CBSM notes that 1) barriers to a desired behavior can be both internal and external, such as a lack of knowledge or simply a lack of needed resources or inconvenience, and 2) to effectively change behavior, as many barriers as possible need to be addressed. The project workgroup identified several potential barriers to the proper disposal of FOG by renters with a short, six-question, digital questionnaire distributed to renters through partnerships between workgroup members and apartment managers. The Houston Apartment Association also helped distribute the questionnaire to property managers in the project area that were outside of workgroup member communities.

To avoid biasing respondents, the questionnaire asked how the respondent disposed of common cooking items (in the sink, in a container, in the trash, other) and included several categories of both well-known FOG sources (cooking oil, grease) and less well-known FOG sources (dairy, salad dressings, condiments). The questionnaire also asked why each item was disposed of in the identified way (habit, what they were taught). These questions attempted to determine if certain FOG items were more recognizable, suggesting a need to include others in education, or if external barriers were impacting the disposal of certain FOG items more than others. Another question asked respondents their level of interest or concern in other topics often featured in existing outreach campaigns (water quality, cost of repairs, damage to personal property) to determine if any were more or less appealing to the target audience. Other questions attempted to gather related information such as how disposable wipes were disposed of and if respondents had submitted plumbing-related maintenance requests in the past year.

The barriers identified by the workgroup after review of the responses included:

- **Lack of knowledge of some common FOG items.** Results indicated that twice as many respondents disposed of dairy down the drain than any other category, and more than any

other category it was listed as being disposed of in this way because this was what they were taught. Salad dressing and condiments, as well as cooking oil, were also disposed of down the drain by several respondents due to either what they were taught or by habit.

- **Habits.** While many respondents indicated the lack of knowledge described above, several respondents indicated that improper disposal practices were due to habit. This suggests that education alone may not be enough to change behavior and that resources to reinforce the education or make the preferred behavior more convenient might be necessary.

In addition to the identified barriers, the responses to the question about concern for certain topics suggested that respondents were more concerned about preventing sewer backups where they live and improving local water quality than they were with costs associated clogged or burst pipes, which is often a focus of FOG outreach messaging.

Proposed Outreach and Education Strategies

The workgroup used the identified barriers, past outreach experience, and reviews of studies on successful outreach campaigns to develop proposed outreach strategies to assist apartment complexes with more effectively educating their residents on the harm caused by improper FOG disposal and encouraging behavior to prevent it.

Messaging

Proposed messaging will focus on explaining what FOG is and how improper disposal of FOG can lead to sewer backups in residences and contribute to the addition of bacteria into local waterways. This can have direct impacts to both individual residences and the community as a whole. Less focus will be placed on the cost of repairs and maintenance and messaging will instead address more detailed explanations of FOG and list specific steps toward the behavior the outreach is trying to promote, which is not putting FOG down the drain.

Education versus Prompts

Since both a lack of knowledge and habit were identified as possible barriers, the workgroup recommends a multi-faceted approach to address education more broadly while providing specific prompts in areas where FOG disposal takes place. More detail on the specific education and prompt resources is provided in the next section.

Communication Materials and Methods

Education: Digital and Print Materials

Materials

The workgroup identified the need for general FOG education, particularly on what items are included in the term FOG, how to properly dispose of the items, and the possible consequences of pouring FOG down the drain. The workgroup discussed the need to have educational resources be something that apartment residents and other renters see on a frequent basis and be tools to reinforce the connection between improper FOG disposal and consequences like plumbing emergencies.

Proposed materials include:

- Social media and newsletter graphics and copy.

- Printed materials, such as small table tents, flyers, or rack cards.
- Giveaway items, like funnels and scrapers, could also be provided in conjunction with printed materials for new residents or in each rental unit.

The messaging for digital and printed materials for education was discussed by the workgroup, and the following guidelines were suggested:

- Items should include a list of FOG items, but in broader categories like “dairy” so residents do not get the impression that items not specifically listed are ok to put down the drain. For example, “dairy” is an umbrella category people can fill in for themselves, but if milk were specifically listed but yogurt or cheese were not listed, people might not connect all of the items with FOG.
- Prevention messaging should focus on the potential harm to the residence or local water quality, not cost.
- Appeals in the messaging should appear to be direct requests from the apartment community or rental property management. For example, consider the messaging in hotel rooms that requests you reuse a towel to help conserve water. Messaging could be customized with apartment names or logos if desired and could make the appeal to “help us keep clogs out of our pipes and sewer backups out of your homes.”
- Simple, direct actions should be identified (like the City of Houston’s “Pour”, “Cool”, “Toss”), and digital messaging could include additional tips to make these steps easier or more convenient.
- Messaging could also note that it is a community effort – in apartment units your clogs could impact your neighbors too.
- Messaging is preferred in both English and Spanish.
- Messaging should spell out Fats, Oils and Grease rather than using FOG, which is a common acronym in outreach circles but may not mean as much to residents who are seeing it for the first time.
- To better connect FOG sources with the action desired, the list should describe “What can go down the drain” (only water) rather than “Sources of fats, oils, and grease”.
- It was noted that in recent partner outreach efforts, images of grease-clogged pipes resonated more with stakeholders.

Suggested Distribution Methods

The workgroup discussed the need to have educational resources be something that apartment residents and other renters see on a frequent basis and tools to reinforce the connection between improper FOG disposal and consequences like plumbing emergencies. Digital messaging is recommended for distribution on social media or resident newsletters. Printed messaging is recommended to be distributed to apartment units on several occasions: as part of new resident packets or placed in newly rented units, and again following routine maintenance, like air filter replacements or fire extinguisher checks, or plumbing repairs (emergency or not) by maintenance staff. The exact method and style of distribution will be determined by each apartment complex based on the services they provide and their new resident welcoming strategies. Residents’ awareness of FOG and its proper disposal will increase with repeated distribution of educational materials. Residents may also change their behavior after making the connection between plumbing issues and improper disposal of FOG.

Barriers Addressed

Educational digital and printed materials will specifically address the lack of knowledge of FOG in general and the different items that are included in the term FOG. If distributed repeatedly and in conjunction with related maintenance issues, the educational materials could also help reinforce the connection between improper FOG disposal and the identified concerns of plumbing backups in homes and local water quality.

Prompts: Print and Other Materials

Materials

While general and repeated FOG education is needed, resources might be more effective when provided when and where the behavior being addressed takes place. To supplement the general education, the workgroup discussed possible prompt resources. Unlike detailed educational materials, prompts would be simple and to the point as reminders of the FOG outreach they saw elsewhere. Prompts would be placed in locations where residents would see them while cooking or washing dishes, the activities that can result in FOG going down the drain. In most cases, the prompts would also focus more on what can go down the drain (water) rather than a lengthier list to check of what cannot go down the drain.

Proposed materials include:

- Magnets that can be placed near the sink or on the refrigerator. Depending on size, magnets might be able to include a condensed list of FOG items. Unlike the other proposed materials, a magnet with a list on the refrigerator could remind residents of what items are FOG as they pull them out to use.
- Stickers or decals for inside the refrigerator, such as on the storage area for butter. This sticker could list some FOG items, but could also include a message like, “help prevent pipe clogs when cooking, remember only water should go down the drain.”
- Waterproof stickers or decals for sinks. Rather than a long message, this prompt would simply remind residents that only water should be going down the drain.
- Waterproof stickers or decals for the garbage disposal switch. Unlike a sticker near this sink and drain, the garbage disposal message could remind residents to think twice because only water should go down the drain, not food scraps.

Suggested Distribution Methods

The more prompts a resident sees addressing proper disposal of FOG when cooking and washing dishes, the more likely residents are to remember the educational items and dispose of FOG items in the trash rather than the drain. However, if a variety of prompt options are created, property management can decide which combination they prefer. Some property managers might agree to putting stickers in all suggested areas, while others might only be willing to add the messaging in the refrigerator or as a more easily removed magnet.

Barriers Addressed

The prompts will attempt to address the identified habit barrier. Residents might have seen educational materials and know how to properly dispose of FOG but might not think of it while cooking and fall back onto the habit of pouring items down the drain.

Complementary Outreach

In addition to the educational and prompt digital and printed materials, another suggested outreach strategy is occasional direct contact through partner outreach at apartment events. This direct outreach would allow discussion of FOG and consequences of improper disposal that would reinforce the distributed materials. It would also allow for demonstrations that could include:

- The Don't Feed the Grease Monster Educational display, poster, and pledge developed for the River, Lakes, Bays 'N Bayous Trash Bash®.
- Pictures or physical examples of clogged pipes caused by FOG.
- A simple cooking demonstration that shows how FOG is created and how to easily dispose of it with a funnel and/or scraper and a container or trash can.
- Giveaway items, like funnels and scrapers.

The public health situation with COVID-19 presents challenges to direct outreach like this, but this type of outreach strategy remains an option to reinforce the other strategies if project partners and properties are interested.

Performance Metrics

The workgroup's recommended performance metrics include working with city and apartment staff to get information on maintenance calls related to plumbing, clogged pipes outside of apartments, and related sanitary sewer overflows for six months before and six months after the pilot project to help determine the impact of the outreach strategies.

To get these metrics, the following partners would be asked to collect specific information:

- The staff in charge of maintenance requests at the rental property will identify the number of (1) plumbing related maintenance calls, and (2) sewer backups in units for the six months prior to outreach implementation and the six months following the start of implementation.
- City staff partnering on the project will identify the number of (1) blockages, (2) sanitary sewer overflows, or (3) other sewer infrastructure issues stemming from FOG that can be traced to one of the participating rental properties for the six months prior to outreach implementation and the six months following the start of implementation.

This information will be reported to H-GAC and the local city partner so that outreach materials and strategies implemented can be appropriately evaluated.