

Know More about Maintenance of Grease Interceptors

➤ **Objective of installation of grease interceptors**

When grease and sewage are discharged into sewers, the grease and sludge accumulate in the pipes. Not only does the accumulation lead to blockage of drainage pipes of the buildings, but the solidification of grease discharged to public sewers also causes poor drainage of sewers in the streets and back flow of sewage, leading to the occurrence of floods. Removing the grease substance in sewers is rather difficult and dangerous, and it consumes considerable manpower, material resources and time. Therefore, persons in charge of food and beverage establishments must install grease interceptors of appropriate specifications on the premises to achieve the separation of grease and water before the grease substance in sewage is discharged into sewers. This can significantly alleviate the accumulation of grease in sewers.

With filtration, precipitation and cooling functions, grease interceptors are installations for effective blocking of the grease substance in water body from being discharged. It performs the normal grease filtration function effectively with proper checking, clean-up and maintenance. In accordance with stipulations, food and beverage / beverage establishments are required to install grease interceptors that meet the standards. The size of a grease interceptor depends on the grease content of food sold by the establishment, the number of seats on the premises and other factors. For specifications, types and other information about grease interceptors, please visit the website of One-stop Licensing Service for Food and Beverage Establishments of the Municipal Affairs Bureau (IAM).

Website: <https://www.iam.gov.mo/onestop-fnb/e/main/default.aspx>

➤ **Cleaning and maintenance of grease interceptors**

The grease and sludge accumulating in grease interceptors require regular clean-up. However, there is no fixed standard for the frequency. It depends on the type of food served, the food preparation procedures, the business turnover and other factors of the establishments. A well-functioning grease interceptor

does not have obvious grease in the outlet compartment and the water outlet can be seen clearly.

In general, it is advised that a grease interceptor should be inspected twice every week. If grease and sludge are found to accumulate to 30% of the retained oily liquid layer, the grease interceptor requires clean-up.

To facilitate self-checking and the inspection work of grease interceptors by license regulation authorities, establishments should be equipped with tools for opening the grease interceptor cover plates which cannot be sealed by adhesion or welding. No fixed objects or facilities are allowed to be placed on top of the cover plates to ensure that they can be flexibly opened at any time. In addition, the grease interceptor and all pipes of a food and beverage establishment must comply with the approved sewerage drawings and plan, and no alteration, dismantling or addition of drainage facilities without authorisation is allowed. Attention should be paid to the following issues for daily cleaning and maintenance of grease interceptors:

- (1) When it is found that there is accumulation of grease in the outlet compartment of a grease interceptor, grease overflow or failure of sewage to pass through a grease interceptor effectively, it shows that the grease and sewage have been discharged into the pipes or have even clogged them. Clean-up and dredging of the drainage pipes have to be arranged immediately;
- (2) When removing grease and waste, people should be careful and prevent the contamination of food and the environment;
- (3) When underground or large grease interceptors are being cleaned, warning signs and guardrails should be placed in the surrounding area to prevent people or objects from falling and the risk of slipping;
- (4) The sewage from kitchens contains food debris. Since food debris is heavier than water, it sinks to the bottom of grease interceptors and forms sediment. Therefore, regular clean-up of the bottom of grease interceptors is required to avoid reducing the effectiveness of grease interceptors. It is advisable to hire a professional grease pumping company to assist in clean-up as the

service can ensure the thorough removal of all waste in the grease interceptors;

- (5) After completion of cleaning, the grease interceptor should be covered properly at once, followed by cleaning and disinfection of the surrounding area;
- (6) In case of cleaning the grease interceptors by the establishments themselves, the waste removed should be put into intact plastic bags or containers which are then sealed properly. Furthermore, they should be placed in appropriate garbage collection installations on the premises;
- (7) The compartment baffles and casing pipes (H pipes) in grease interceptors have to be checked for damage or leakage regularly. Repair should be carried out immediately if any abnormality is found;
- (8) The inlet pipe of a grease interceptor has to be connected to a casing pipe (H pipe) for discharge, and it cannot directly discharge liquid into the outlet compartment of a grease interceptor nor allow liquid to enter the outlet compartment. In addition, it cannot be connected directly to the internal manhole of buildings or public sewers in the streets for discharge.
- (9) Since the drainage facilities in toilets are not connected to a grease interceptor, the water body for cooking and washing dining ware must not be poured into toilet bowls, wash basins, drain outlets and floor drains in toilets, etc.

➤ **Inspection system of grease interceptors of food and beverage establishments**

In accordance with laws and regulations, the functions of IAM include inspection of the use, maintenance and cleanliness of grease interceptors in food and beverage establishments. According to Article 21 and Article 22 of Law no. 9/2018 “*Criação do Instituto para os Assuntos Municipais*” (Establishment of Municipal Affairs Bureau), the inspection staff of IAM have the right to perform their duties at locations or business establishments subject

to monitoring activities. Establishments are obligated to co-operate with the inspection and supervision work of IAM, including opening the cover plates of grease interceptors for on-site inspection and record by inspection staff, providing licensing documents of the establishments, etc. In case of refusal to co-operate or failure to assist in opening the cover plates of grease interceptors (e.g. absence of tools), the inspection staff will issue notifications and follow up on the relevant penalty procedures in accordance with the laws and regulations.

➤ **Applicable penalties**

In accordance with Decree-Law no. 16/96/M dated 1 April, improper functioning of grease interceptors due to poor maintenance, alterations without obtaining permission from the licensing authorities, and environmental hygiene issues on the premises or the vicinity due to poor maintenance and cleanliness of facilities are punishable by a fine of between MOP 2,500 and MOP 35,000. Severe cases are even punishable by the penalty of closure of establishments.

➤ **A well-functioning grease interceptor does not have grease in the outlet compartment.**





- **There is accumulation of grease in the outlet compartment, indicating that the grease interceptor has not performed the desired filtration function.**

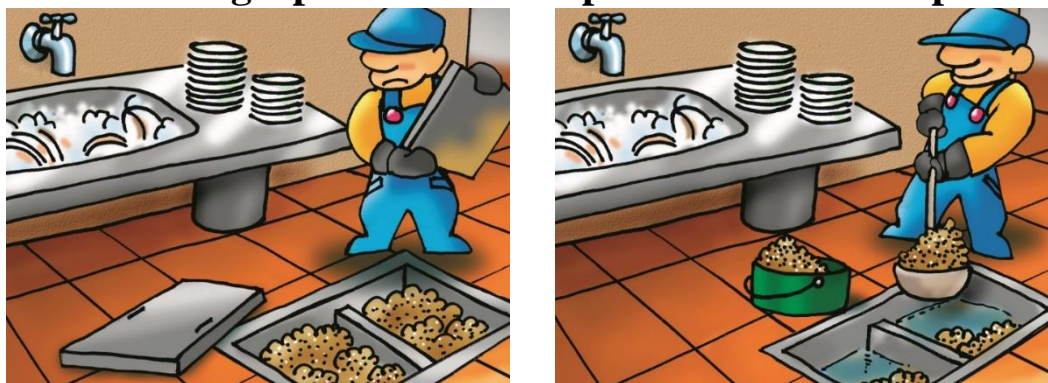


- **The grease or water level has reached the top and the water outlet cannot be seen, showing that the grease interceptor has lost its grease separation function or the sewer has been clogged.**





Infographic on Clean-up of Grease Interceptors



When it is found that there is grease accumulation in the outlet compartment (grease and sludge accumulating to 30% of the retained oily liquid layer), overflow of grease substance or failure of sewage to pass through grease interceptors effectively, clean-up has to be arranged immediately.



The waste removed should be sealed carefully and placed in appropriate garbage collection installations on the premises.



When cleaning is completed, the grease interceptor should be covered properly and the vicinity of the grease interceptor should be cleaned.



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➤ **Reference**

**Promotion of the awareness of correct use of grease interceptors –
“*Informações ao Público*” video**

[Click to watch](https://www.iam.gov.mo/c/inform/video/637503841865524)

<https://www.iam.gov.mo/c/inform/video/637503841865524>