MATERIAL RELIED UPON

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENT

The following studies, reports, documents, and information were relied upon in formulating this proposal:

1. "Notice of an upcoming Interested Persons Meeting" held on March 29, 2011, in Sacramento, California, related to transporters of inedible kitchen grease, published in the *California Regulatory Notice Register*, March 25, 2011 (Register 2011, No. 12-Z).
2. "Inedible Kitchen Grease Workshop" agenda, California Department of Food and Agriculture, March 29, 2011.
3. "What's gooey, smelly and very, very valuable?" *Capitol Weekly*, August 25, 2011, [www.capitolweekly.net].
4. "CDFA Teams with law enforcement to stop thefts of inedible kitchen grease" *San Diego Newscape,* October 27, 2011 [www.sandiegonewscape.com].
5. "Grease Theft Battle Continues in the Golden State" *Render Magazine*, April 2012 [rendermagazine.com].
6. Proposed new form, MPES Form 79-120 (Est. 03/12) Manifest-Inedible Kitchen Grease Transport
7. Informational diagram showing interceptor and grease traps
8. "Collecting Recycled Cooking Oils or Greases for Biofuels" *National Renderers Association*, October 2008 [informational document].
9. "Survey Says: A Snapshot of Rendering" *Render Magazine*, April 2011, Tech Topics [informational document].
10. Informational document showing fats, oils, and grease removed from a food service establishment, *City of Roseville*, California [www.roseville.ca.us].
11. Economic Impact Assessment

DEPARTMENT OF FOOD AND AGRICULTURE

MEAT AND POULTRY INSPECTION BRANCH

NOTICE OF AN UPCOMING INTERESTED PERSONS MEETING

In accordance with Government Code section 11346.45, and Chapter 5, (commencing with section 19200), of Part 3, Division 9, of the Food and Agricultural Code, representatives from the California Department of Food and Agriculture are conducting a public meeting. The public meeting is to discuss proposed draft regulatory language relating to the implementation of a manifest reporting system for the disposition of inedible kitchen grease. Any person interested may present statements or recommendations at the public meeting, or may submit written comments relevant to the action proposed to the person designated in this Notice as the contact person by March 29, 2011.

Public Meeting Tuesday, March 29, 2011

California Department of Food and Agriculture
1220 N Street, 1st Floor Auditorium
Sacramento, CA 95814
9:00 a.m. – 12:00 p.m.

Contact Person

Douglas Hepper, DVM, Chief
Department of Food and Agriculture
Meat and Poultry Inspection Branch
1220 N Street, Room A-125
Sacramento, CA 95814
Phone: (916) 654-0504
Email: DHepper@cdfa.ca.gov

Materials relating to this proposed action may be found at: www.cdfa.ca.gov/ahfss/regulations.html

CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE
Karen Ross, Secretary

Annette Whiteford, D.V.M.
California State Veterinarian
Director, Animal Health and Food Safety Services
California Department of Food and Agriculture
1220 N Street, A-114
Sacramento, CA 95814
(916) 654-0881

California Department of Food and Agriculture

Meat and Poultry Inspection Branch

Inedible Kitchen Grease Workshop

March 29, 2011
9:00 AM – 12:00 PM
California Department of Food and Agriculture
1220 N Street, 1st Floor Auditorium
Sacramento, CA 95814

Representatives from the California Department of Food and Agriculture (Department) will meet to discuss and/or recommend an action upon the following items listed in this agenda. The public is invited to attend and provide comments on a proposed manifest system for inedible kitchen grease (IKG) disposition. The intent is to obtain input and general consensus on draft text that may become a part of a regulatory action in the future.

Agenda:

1. Introductions (Dr. Annette Whiteford)
2. Discussion of resources / constraints of current IKG system (Dr. Annette Whiteford)
3. Background and general information about the current and proposed IKG system (Dr. Douglas Hepper)
4. Example draft regulatory text (Dr. Douglas Hepper)
5. Public Comment (questions/concerns/recommendations)

Further information and example regulatory language will be posted by March 17, 2011 at:

http://www.cdfa.ca.gov/ahfss/regulations.html

Webinar Registration: https://www3.gotomeeting.com/register/849066854

Teleconference – Must be registered for the webinar to receive teleconference phone number and individualized pin number

Written comments may be submitted to: DHepper@cdfa.ca.gov

This Departmental meeting is operating under the requirements of the Bagley-Keene Open Meetings Act set forth in Government Code Section 11120-11132. The Act generally requires the Department to publicly notice their meetings, prepare agendas, accept public testimony, and conduct their meetings in public.

Questions regarding this agenda may be directed to Dr. Douglas Hepper, Chief, Department of Food and Agriculture, Meat and Poultry Inspection Branch, 1220 N Street, Room A-125, Sacramento, CA 95814, telephone (916) 654-0504 or email DHepper@cdfa.ca.gov

http://www.capitolweekly.net/article.php?xid=zy1w5awkgid5tq

CAPITOL WEEKLY
THE NEWSPAPER OF CALIFORNIA GOVERNMENT AND POLITICS

What's gooey, smelly and very, very valuable?

By **Greg Lucas** | 08/25/11 12:00 AM PST

It's after midnight in a gritty urban alleyway, empty except for clusters of 10-foot by 4-foot green dumpsters and a smaller, locked 250-gallon metal green container.

A pickup with headlights off comes to a quiet stop. Men approach the green container, break the lock, toss a hose inside and swiftly pump the contents into a large tank on the pickup's bed.

Within moments, the truck whisks away. Another four containers are emptied within the next hour.

For just 60 minutes of effort, the thieves are $2,400 richer. Another three hours and 750 gallons later, they'll have cleared nearly $10,000. Not bad for one night's work.

The precious substance worthy of late night thievery?

Kitchen grease.

The same foul, food-flecked kitchen grease restaurants pour into special dumpsters and hire haulers to dispose of.

Except now grease is so high-priced, the haulers pay the restaurants for the privilege of collecting it.

When inedible cooking grease is purified and the moisture removed, it becomes "yellow grease," a commodity used in making biofuels as well as chicken and livestock feed.

The burgeoning biofuel market – and the high price of gasoline and regular diesel - has driven the price for a pound of yellow grease to 43 cents, making it nearly as valuable as liquid gold. Six years ago, the per-pound price hovered around 6 cents.

Today, the roughly 2.5 billion pounds of yellow grease manufactured each year has a market value of nearly $1.1 billion.

A gallon of used grease is roughly eight pounds. So that makes purloining the contents of a half-dozen 250-gallon grease containers a lucrative enterprise.

While thieves don't get the full 43 cents a pound, they can pocket somewhere between 20 cents to 30 cents, state enforcement agencies say.

That's money that would otherwise be paid to the legitimate haulers who eat the cost of manpower, transportation and equipment when their grease is filched.
"Sometimes we almost get mocked by people saying, 'You're complaining about someone stealing a bit of grease?' But that grease has a high monetary value and if it's not there to pick up, you're not making money," said Tom Cook, President and CEO of the National Renderers Association in Alexandria Virginia.

A large chunk of California's 44 registered renderers is collecting used kitchen grease.

The thieves certainly know the value of grease because stealing it is a nationwide phenomenon.

"Theft of Cooking Oil on Rise," reads the headline in the June 26 edition of the Hudson Valley's Middletown Times Herald-Record.

"Used Cooking Oil a Hit Commodity for Thieves," reported KZTV10 in Corpus Christi on May 15.

"Thefts of Cooking Grease Way Up," said the Omaha World-Herald on April 26.

Similar reports have appeared in the media in Albuquerque, Fort Meyers, Gainesville, Hannibal, Port Charlotte and Wichita within the last six months.
The same epidemic is occurring in California and that has the Golden State's renderers riled up.

Mad enough they are sponsoring legislation to reimpose on themselves a lapsed $3,000 annual regulatory fee in an effort to help the state be more zealous in fettering out more green thieves.

At a spring conference sponsored by the National Renderers Association, Andrew Andreoli, a senior vice president of Vernon-based Baker Commodities, said his company "suffered a $2 million loss in stolen raw material and equipment damage due to thefts just in the Los Angeles area," according to Render Magazine.

Vernon is also home to three other rendering operations including Farmer John-Clougherty Packing who fear their costs of doing business, particularly energy, will climb if Assembly Speaker John Perez, a Los Angeles Democrat, succeeds in unincorporating the city and making it part of Los Angeles County.

"Our industry is losing hundreds and hundreds of thousands of dollars to these rogue people every month," says Michael Koewler, president of Sacramento Rendering Company. Koehler's company has 2,500 customers from whom he collects grease.

Doug Hepper, chief of the California Department of Food and Agriculture's Division of Meat, Poultry and Egg Safety, told Capitol Weekly he received an email from a Northern California renderer who reported 2,700 thefts from May of 2010 through May 2011 of 5.1 million pounds of grease with a market value of $1.5 million.

"It's rampant," Hepper says of the thefts, adding that California has two full-time and two part-time inspectors on the trail of grease thieves. He readily admits that isn't enough manpower to rein in the number of thefts.

"We catch people mainly through leads. We simply don't have the personnel to sit in alleys at night," Hepper said. "Some of the rendering companies have hired investigators who then give us information about their containers."

There are more than 250 renderers nationwide, according to Cook.

Of California's 44 renderers, 26 make their living exclusively from collecting and processing inedible kitchen grease.

The remaining 18 handle cooking grease too but they also do what renderers have been doing since the Middle Ages when the fat trimmings from butchers were used in candles and soaps.

Renders call themselves the "invisible industry" and, more recently, the "first green industry."

With some justification.

Humans don't eat about half of a cow, 45 percent of a hog and 40 percent of a chicken. Renders cook those "spare" parts at a high temperature, remove any moisture and separate the remaining fat. The protein can be used for pet food and the fats for lubricants, paints, textiles, soaps, cosmetics and toothpaste.

Nationwide, each year renderers recycle some 54 billion pounds of leftover animal parts and grease that would otherwise be land filled, composted or find its way into the water supply.

And for every metric ton of CO2 produced by rendering plants, more than 7 metric tons are removed from the environment.

"Without rendering we'd be in serious trouble," says Cook, noting that 54 billion pounds of waste would fill the Dallas Cowboys stadium 10,000 times. "That's a lot of grease and inedible animal byproducts."

Unlike in some states, it's a crime to steal grease in California. First offense is a misdemeanor punishable by up to a $10,000 fine or up to one year in county jail or both. If previously convicted, subsequent violations can be punished with state prison time of up to one year.

"The difficulty we've had is getting district attorneys to prosecute," said Hepper. "They're stretched so thin and have to set priorities. The theft of inedible kitchen grease does not appear to be a high priority crime."

Hepper said the state is considering legislation to increase the $1,000 administrative fine it can levy to create a greater deterrent.

And, Hepper says, even with each of the state's renderers sending the department $3,000 in fees each year, it won't hire another investigator.

However, he says the department is weighing adding an administrator specializing in grease thefts and other rendering issues.

The renderers' bill is SB 513 by Sen. Anthony Cannella, a Ceres Republican.

"California's rendering industry – although not often talked about – does play an important role in supporting our state's agribusinesses and in protecting public health," said Canella, noting that his bill also creates a seven-member rendering advisory board within the food and agriculture department.

An advisory board is another way the industry hopes to raise its "invisible" profile. Says Koewler: "The point is to get these thieves off the street and create an environment in which everyone competes legitimately on a level playing field."

http://www.sandiegonewscape.com/index.php?option=com_content&view=article&id=2941:cdfa-teams-with-law-enforcement-to-stop-thefts-of-inedible-kitchen-grease&catid=9:california&Itemid=2

CDFA teams with law enforcement to stop thefts of inedible kitchen grease

Written by Green Liver Watch
Thursday, 27 October 2011 19:24

San Diego, California - Inedible kitchen grease (IKG), once regarded as a waste product and used primarily as an additive for animal feed, has become an elixir in the booming green economy. The grease's value as a biofuel is being increasingly recognized. IKG is now coveted, which makes it a target for theft.

CDFA has responsibility for regulating IKG transport in California and is concerned that increases in theft is costing legitimate industry millions of dollars in lost revenue every year. In an attempt to reduce these losses, the agency is now teaming with a law enforcement agency in a high-theft area to pull over vehicles transporting IKG, making sure they're in compliance with state law. The partnership, which is in its very early stages, has already detected violators. CDFA will pursue additional partnerships in other high-theft areas.

http://rendermagazine.com/articles/2012-issues/april-2012/grease-theft-battle-continues-in-the-golden-state/

Grease Theft Battle Continues in the Golden State

By Tina Caparella

Still combating the on-going thefts of used cooking oil, members of the Pacific Coast Renderers Association (PCRA) met in late February to address this and other pressing issues at the group's 80th annual convention.

One tool California renderers have been given to help guide the state's agriculture secretary on the grease theft situation is the Rendering Advisory Board. Established last year by the passage and signing of Senate Bill 513, and supported by members of the rendering industry, the seven member advisory board will make recommendations to the California Department of Food and Agriculture Secretary on all matters pertaining to the Meat, Poultry, and Egg Safety (MPES) Branch's Rendering Program, including adoption, modification, and repeal of regulations and procedures; procedures for employment, training, supervision, and compensation of inspectors and other personnel; rate and collection of license fees and penalties; acquisition and use of equipment; posting and noticing changes in bylaws, general procedures, or orders; and all matters pertaining to Food and Agricultural Code Division 9, Part 3, Chapter 5, including, but not limited to, the inspection and enforcement program, annual budget, necessary fees to provide adequate services, and regulations required to accomplish the purposes of the chapter. Six of the seven members will be licensed renderers, dead stock haulers, and transporters of inedible kitchen grease. At least one of these six members must have experience and expertise in alternative uses of rendered products, including, but not limited to, use as energy, alternative fuels, lubricants, and other nontraditional uses.

There is also a vacancy for a public member who must have experience and expertise in one or more of the following: water quality, publicly owned treatment works and water infrastructure, or law enforcement. Applications to serve on the board were accepted through the end of March. Dr. Douglas Hepper, MPES Division, discussed the key workload areas for the department regarding rendering. Although his staff will be involved in the advisory board, Hepper doesn't see a significant increase in the workload. However, auditing company records to combat inedible kitchen grease theft and enforcement of the grease theft law and program will mean significant more staff time will be needed so two more personnel have been assigned to the program. Joining two full-time field investigators and one part-time administrator on a trial basis will be one part-time special investigator and one veterinarian. The program is funded by industry registration fees with projected revenue covering estimated expenditures this year, but next fiscal year, costs will rise due to the additional personnel and grants to educate law enforcement on the grease program in those areas with a high rate of theft.

The city of Chino, CA, recently received a $55,000 grant to cover overtime for officers to work in the field at night, when grease theft is most rampant, over a three-month period. Hepper said positive results included lots of press, 16 arrests (many for other than grease theft such as driving under the influence), and seven citations of notice to appear. Of the 518 enforcement contacts, seven were unregistered transports resulting in four arrests and one vehicle being impounded, with two arrests for inedible kitchen grease theft.

Hepper noted that several other cities have been identified for possible educational grants but they are dependent on the amount of grease theft reported and willingness of law enforcement to partake in the training. He also recommended the possibility of grants to educate district attorney offices to aid in prosecuting cases.

"We need convictions," Hepper insisted. He next updated renderers on the development of an inedible kitchen grease manifest, which will be a "cradle" (generator) to "grave" (renderer, public owned treatment works, etc.) recordkeeping system. As soon as the new rendering regulation is published, expected sometime in March, the manifest proposal will be released and should be in place by 2013.

Continuing the discussion on grease theft was Dennis Albiani, California Advocates, who mentioned a placement bill was just introduced to significantly increase the penalties under the grease theft law. He will be examining other "commodity theft" bills that cover such items as copper, sprinkler pipes, and construction sites to get ideas on fees, manifests, and so forth. Tad Bell, California Grain and Feed Association (CGFA), believes the rendering advisory board will help the industry and recommended having a law enforcement presence on the board. He also encouraged renderers to report all grease thefts, including cost of theft in lost revenues to renderers and restaurants and any equipment damage, to local police agencies so it becomes part of the "record" and can then perhaps be tracked.

CGFA's Chris Zanobini suggested the industry become more involved with local elected officials and law enforcement as another means of education, even perhaps hosting a fundraiser for upcoming elections. He then informed attendees on CGFA's many activities, such as coordinating with the American Feed Industry Association on the complexities of the Food Safety Modernization Act, which Zanobini declared "is going to turn a lot of people upside down." CGFA is also working with the University of California, Davis on revamping its very old and inefficient feed mill.

Shifting the focus to other pertinent issues was Ross Hamilton, Darling International, who wondered what the rendering industry is telling the public. Agriculture, in general, has changed so much over the past 15 to 20 years with fewer consumers even knowing what agriculture is all about. Hamilton said with two career households, there is little time to become informed so the public often relies on the media, other consumers, and the Internet, which can often contain unfiltered facts and fiction.

To get the best information out, Hamilton advised having a clear, concise message, preferably in the first sentence, and creating a 30 second "sound bite." Also, answer questions about what the industry does with such phrases as "kills pathogens," "protects the environment," "recycles carbon," and "recycles energy." Another particular message he recommended was, "Rendering provides control, verification, and traceability to regulatory agencies and the public that condemned or expired meat products are not re-used as human food."

"And rendering takes only hours to do this, not weeks or months like other industries," Hamilton added. He also urged highlighting the impact the rendering industry has on the U.S. economy in the form of jobs, taxes, and purchases, all things the public cares about along with the "feed the world" concept.

"We are recycling proteins that feed animals that feed people," Hamilton pointed out. "The rendering industry needs to be recognized as being essential, and as being purveyors of progressive, effective technology." He said the industry should strive to have consumers care if

their local restaurant or supermarket uses rendering services so as not to be wasteful by improper disposal.

J.J. Smith, Valley Proteins and chairman of the National Renderers Association (NRA), informed attendees that the regulatory atmosphere in the United States is very active, but nothing is specifically directed at rendering. NRA is working on increasing its communications with the public and with packer-renderers who are not members of NRA. One concern of Smith's and the association's is the long-term funding for the U.S. Department of Agriculture's Foreign Agriculture Service (FAS) that helps agriculture associations fund international programs that promote exports. He encouraged continual industry support, whose contributions are matched by FAS.

Grease theft is no stranger to Smith's part of the country (East Coast). Valley Proteins was successful in getting a grease theft law similar to California's passed in Virginia and is currently working on similar legislation in North Carolina.

David Meeker, senior vice president, NRA Scientific Services, covered the gamut of regulatory activity in Washington, DC, beginning with three Environmental Protection Agency (EPA) proposals on major source pollution, area source pollution, and the definition of solid waste. The NRA submitted a comment letter to each proposed regulation, including requesting that rendering be removed from the solid waste definition. Meeker gave credit to the association's Environmental Committee for its diligent work on keeping up-to-date and responding to these complex matters.

In February, EPA quietly released its dioxin study that contains no language indicating food and feed are a risk. Meeker said NRA has worked hard for years, dating back 15 years with Dr. Don Franco, educating EPA on the non-risk of rendered feed ingredients.

"In the context of EPA and this administration's penchant for regulations, we consider it a victory," Meeker commented. Last year the association used the animal feed dioxin incident in Europe to educate the U.S. feed industry on the risk of buying feed fats from discounted and unlicensed sellers.

NRA President Tom Cook shared the news that China has reopened its borders to tallow from Canada. He is optimistic that U.S. tallow won't be far behind as the association's staff has persistently educated Chinese authorities on the safety of tallow from this country. Cook is also working to inform the U.S. cattle industry, which is focused on getting the China market open for beef, on the value tallow brings to each cattle so they will include the commodity in discussions with leaders.

Switching his aim to Washington, Cook noted that over 1,000 tax credits, including biodiesel and alternative fuel credits, expired at the end of 2011 and it's uncertain if any of them will be reinstated due to this being an election year. He predicted the U.S. Senate has a good chance to switch to a Republican majority for 2013, explaining that of the 33 seats (out of 100) up for election, 23 are held by Democrats that have to be defended. Currently the Senate is comprised of 53 Democrats and 47 Republicans, so Republicans need to get four of the 23 seats up for grabs, and five of those seats are "open," meaning the Democrat is retiring.

"I think it will be hard for the Democrats in the Senate to keep their majority," Cook commented.

Balancing out the discussion was Ridley Bestwick, West Coast Reduction (WCR), Canada, where 2.6 million metric tons of raw material is collected as a service. The rendering industry has changed dramatically since the discovery of bovine spongiform encephalopathy (BSE) in the country's native cattle herd in 2003. Nineteen cases have been reported to date, the last one being February 2011 in a cow born in 2004, after the original feed ban was put in place but before the enhanced feed ban was implemented in 2007. Bestwick stated that before BSE, WCR collected 60,000 dead stock per year; now that number has dropped by half to 30,000. "Not sure what has happened to the other 30,000 dead stock," he wondered, then noted that in 2010, over one million cattle were exported to the United States, higher than pre-BSE levels. The enhanced feed ban has caused the Canadian beef industry to shrink and been costly for the country's renderers due to loss of significant markets for rendered products, specified risk material crax trucking and disposal costs, and raw material separation. On a bright note, Canadian tallow has found other markets such as Korea, Japan, Taiwan, and Singapore, and the China market just reopened, with Bestwick estimating exports to begin before the end of the year.

Grease theft is also on the front burner with Canadian renderers, with about 15 percent of used cooking oil being stolen, which equates to about 20,000 metric tons per year with a value of $20 million. In Vancouver, WCR is having trouble getting regulatory authorities interested in grease theft due to overburdened courts, and while renderers' oils are heavily regulated by the

Canadian Food Inspection Agency, Bestwick said competitors and grease thieves are not and are free to export without restrictions.

On the biodiesel front, Canada has two major producing plants – Biox and renderer Rothsay – covering 75 percent of production. In Western Canada, two plants are due to come online this year, including a 70 million gallon per year facility being built by Archer Daniels Midland in Alberta that will use canola oil. Government tax incentives for biodiesel are slowing being phased out on the thinking that mandates, both nationally and provisionally, will drive the fuel usage. The Canadian Renewable Fuel Standard implemented in December 2011 mandates a two percent biodiesel blend in the country's petroleum diesel over an 18-month phase-in period, creating a 160 million gallon per year demand, far exceeding Canada's production capacity. Bestwick noted that most of Canada's biodiesel is currently exported to the United States. PCRA concluded the convention with its business meeting where Jason Andreoli, Baker Commodities, was elected as the association's vice president to replace Dennis Luckey, who stepped down due to his impending retirement in 2013.

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STATE OF CALIFORNIA

DEPARTMENT OF FOOD AND AGRICULTURE

Meat, Poultry and Egg Safety Branch
1220 N Street
Sacramento, CA 95814
(916) 900-5004
79-120 (Est. 03/12)

Manifest No. 00001

Manifest - Inedible Kitchen Grease Transport

Proposed New Form

Receiving Facility Name:	Date:	Total Amount of Inedible Kitchen Grease Received:	Lbs. / Gal.
Receiving Facility Address:	Time:	Type of Inedible Kitchen Grease (Check One): ☐ Used Cooking Oil ☐ Interceptor/Trap Grease	
Transporter Name:		Vehicle Decal Number:	
Driver Name (Printed):		Receiving Facility Representative Name (Printed):	
Driver Signature:		Receiving Facility Representative Signature:	

Generator Name:	Date:	Total Amount of Inedible Kitchen Grease Removed:	Lbs. / Gal.
Generator Address:	Time:	Type of Inedible Kitchen Grease (Check One): ☐ Used Cooking Oil ☐ Interceptor/Trap Grease	
Transporter Name:		Generator Representative Name (Printed):	
Driver Signature:		Generator Representative Signature:	

Generator Name:	Date:	Total Amount of Inedible Kitchen Grease Removed:	Lbs. / Gal.
Generator Address:	Time:	Type of Inedible Kitchen Grease (Check One): ☐ Used Cooking Oil ☐ Interceptor/Trap Grease	
Transporter Name:		Generator Representative Name (Printed):	
Driver Signature:		Generator Representative Signature:	

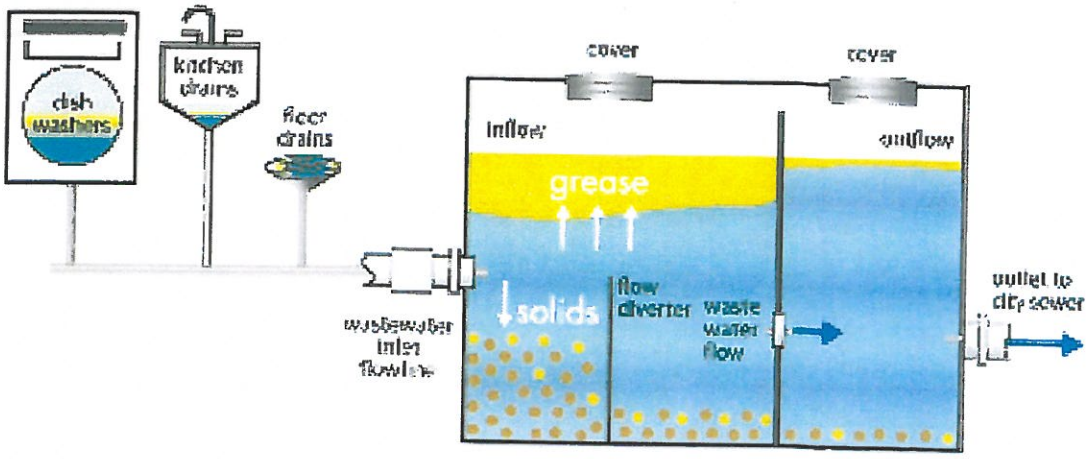
Generator Name:	Date:	Total Amount of Inedible Kitchen Grease Removed:	Lbs. / Gal.
Generator Address:	Time:	Type of Inedible Kitchen Grease (Check One): ☐ Used Cooking Oil ☐ Interceptor/Trap Grease	
Transporter Name:		Generator Representative Name (Printed):	
Driver Signature:		Generator Representative Signature:	

Complete manifest from bottom section to top. Provide generator with receipt at time of grease removal or mail or deliver receipt to generator within 45 days. For loads obtained from more than three generators, complete the top receiving facility section only on the page containing information for last generator serviced.

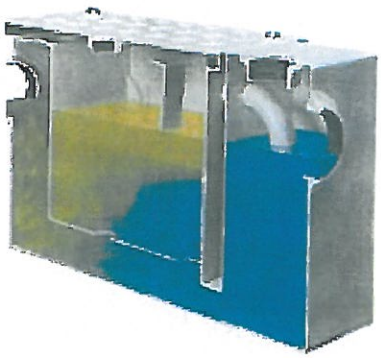
6

Informational Diagram

A grease trap or interceptor is a plumbing feature designed to prevent grease and other solid materials from entering a sewer system



Grease traps slow the flow of water coming from drains, allowing the water and grease time to cool. This cooling causes the grease to coagulate and float to the top while other heavier solids fall to the bottom of the trap. The remaining water in the middle is free to pass through on to the city sewer lines.



Grease Trap

Collecting Recycled Cooking Oils or Greases for Biofuels

October, 2008

Overview:
Recycled cooking oil and grease from food-processing in-line grease traps has been collected by independent renderers for many years. Unprocessed recyclable cooking oil may contain over 50 % impurities such as water, food particles, plastic utensils, etc. Most processed recycled cooking oils are sold as Yellow Grease.

Many independent renderers operate fleets of specialized trucks for transporting these various raw materials to plants for processing. They maintain the required waste transportation licenses in each state in which they operate and have implemented environmental protection and safety programs which protect communities from spills and other hazards of transporting waste materials.

Rendering and its Role:
At rendering facilities, these materials are unloaded, decanted, and the wastewater is processed. The raw materials are cooked and any solid fractions from the fat or oil are separated.

In most areas, a waste processor or waste disposal license is required to process these recyclable materials. The rendering industry has implemented a Code of Practice program in order to assure proper processing and testing of these food waste products. All biodiesel fuel that passes the American Society for Testing and Materials standards (ASTM D 6751) will be of high quality.

Each plant complies with various federal, state, and local requirements involving air emissions, wastewater processing, spill prevention, stormwater drainage, and handling food wastes.

Yellow Grease as Biofuel
Recycled cooking oils or greases are usually sold under the commodity name of Yellow Grease. However, Yellow Grease may also contain some animal fats, not just recycled vegetable oils. Yellow grease shipments have widely-varying melt points, free fatty acid (FFA), and moisture, insoluble impurities, and unsaponifiables (MIU) values depending on the incoming oils used in the various restaurants and the storage conditions. Recycled oils require additional processing to remove contaminants and may also contain sulfur compounds that may preclude their use in making biodiesel to be used with newly-mandated Ultra Low Sulfur Diesel.

Higher levels of saturation for animal fats and higher FFA levels for recycled cooking oils dictate additional biodiesel processing in order to produce finished biofuel that meets ASTM specifications.

National Renderers Association, 801 North Fairfax Street, Suite 205, Alexandria, VA 22314;
phone, 703/683-0155; fax, 703/683-2626; e-mail : renderers@nationalrenderers.com
Web site address: www.nationalrenderers.org

Safety and Environmental Issues
Biodiesel production is inherently dangerous due to the handling of fats and oils feedstocks, alcohol reactants, and strong acids and bases, sometimes under pressure or high temperatures. Potential collectors or users of these materials should fully research safety and handling issues to gain a full knowledge of oil and grease handling and biodiesel processing. In addition to safety issues, the production of biodiesel also generates disposal concerns with byproduct glycerin, unreacted feedstocks, and off-spec product.

Theft is a Problem for Renderers
Even though in most states it is illegal to steal inedible grease, and unlawful to transport inedible grease without a license, increased prices for biofuel feedstocks have led to many thefts of recycling equipment and spent cooking oil and grease. Some people see an oil collection barrel behind a restaurant and consider it an open invitation to fill up their bus. News media often run stories about "entrepreneurs" that run their vehicles on biodiesel home-made from recycled grease that actually belongs to an independent renderer by contract with the restaurant.

Other Legal Considerations
Using recycled cooking oil and grease as a neat fuel for cars or making biodiesel at home is technically illegal in a number of ways. In some states, it is illegal to have caustic and other chemicals in residential and other areas not zoned for such activities. In addition to violating some state and local laws, federal and state fuel taxes are avoided. It is known that the Internal Revenue Service (IRA) of the U.S. is interested in pursuing those motorists who are not paying their federal fuel taxes. Theft of spent cooking oil and grease results in millions of dollars of loss to the IRS each year.

Recommendation:
States should consider strengthening laws to prevent theft of renderers' recycling equipment and cooking oil and grease. Threats to the profitability of renderers' grease and oil recycling operations will also endanger communities' efforts to maintain a clean environment.

National Renderers Association, 801 North Fairfax Street, Suite 205, Alexandria, VA 22314;
phone, 703/683-0155; fax, 703/683-2626; e-mail : renderers@nationalrenderers.com
Web site address: www.nationalrenderers.org

By Mark Jekanowski, Informa Economics, Inc.

Survey Says: A Snapshot of Rendering

In 2010, the National Renderers Association (NRA), in partnership with the Animal Protein Producers Industry Committee and the Fats and Proteins Research Foundation, contracted with Informa Economics to develop an updated industry profile including descriptions of raw material streams and markets.

The survey resulted in detailed information collected from 96 rendering plants across the United States and Canada, including independent renderers ranging in size from single plant operations to the very largest firms operating many plants across several states. Rendering plants owned by meatpacking firms also provided information so that the results cover the complete spectrum of North American rendering facilities. Volumes unaccounted for by the survey were estimated using official statistics on livestock slaughter. It is believed that this provides the most accurate, detailed, and comprehensive information on the rendering industry ever collected.

Rendering Industry Profile

The U.S. livestock sector slaughters more than 150 million head of cattle, calves, hogs, and sheep and more than 55 billion pounds of poultry annually. In addition to protein for human consumption, the meat production system produces an enormous amount of by-products that are in turn transformed into nearly 20 billion pounds of highly valuable feed and industrial products in the form of various types of fats and proteins. The task of transforming by-products from slaughterhouses, packing plants, and other segments of the food industry into safe and valuable products lies with renderers. Animal offal (including viscera, heads, bone, blood, etc.) is the primary raw material for rendering operations, with small additional amounts from dead stock and waste generated from restaurants, grocery stores, and butcher shops. From these raw materials, renderers manufacture meat and bone meal (MBM) and other proteins for use in livestock feed, as well as tallow, greases, and various other products of value to the feed, industrial, and food processing industries.

The rendering industry consists of more than three dozen firms operating more than 200 plants across the United States and Canada. It includes plants that are integrated with meat processing companies to process the captive by-products generated by these firms, and independent renderers that are not directly owned or operated by meat processing companies but instead collect and process by-products from many different sources, including livestock slaughter and processing facilities, grocery stores, restaurants, and other entities along the meat production chain. Integrated renderers are typically associated with the nation's largest meat processing companies, such as Smithfield, Tyson, and Cargill, while independent renderers range in size from single-plant operations that process less than 10 U.S. tons, or 20 million pounds, of raw material per year, to firms with multiple plants spread across many states with combined raw-material processing capacity in excess of one billion pounds annually.

Following are other distinguishing characteristics of rendering operations.

- Integrated renderers, by their nature of being directly associated with specific meat processing facilities or companies, typically render only a single type of species material at each plant, such as cattle, swine, or poultry by-products. Independent renderers commonly collect material from many sources, so both their raw material and finished product stream tends to include mixed species.
- For meat processors with integrated or highly-coordinated livestock supply chains (particularly the swine and poultry sectors), the fats and proteins produced from their rendering facilities are commonly used in the feed rations of their own captive livestock supplies, along with sales to other users and into other markets.
- The collection and processing of restaurant grease, waste from grocery stores and butcher shops, and livestock that die on farms prior to slaughter is done almost exclusively by independent renderers.
- Independent renderers that process animal by-products usually have contractual agreements with meat processors in which renderers pick up offal at the processing plant. Meat processors without their own rendering facilities are served exclusively by independent renderers, and some meat processing firms with their own rendering facilities also sell by-products to independent firms.
- There are several independent rendering firms (as well as individual plants owned by multi-plant firms) that focus exclusively on grease collection and processing.

Raw Material Volume

Livestock slaughter by-products, restaurant grease, and scraps from grocery stores and butcher shops comprise the three primary raw material streams processed by renderers. The total volume of these raw materials processed is estimated at 48.32 billion pounds in 2010, about 91 percent of which consists of slaughter by-products, five percent is restaurant grease, and four percent is waste from grocery stores and butcher shops.

Integrated renderers are estimated to process 48 percent of all raw materials, but their input stream consists entirely of animal by-products. Of the 52 percent of all raw materials handled by independent renderers, 10 percent consists of restaurant grease, seven percent is grocery/butcher scraps, and the remaining 83 percent is in the form of slaughter by-products.

Slaughter by-products comprise the largest share of the rendering industry's raw material stream. The volume processed by renderers is estimated currently at just below 44 billion pounds, down from 46.28 billion in 2008 – a decline of nearly five percent. Raw material volumes available for rendering are directly related to the volume of livestock and

poultry slaughtered, which varies annually based on economic conditions in the industry.

The rendering industry also collects waste generated from butcher shops, grocery stores, and other facilities that perform the final processing function for meat and meat products sold at retail. This waste can include trimmings generated by in-store butchers as well as potentially significant volumes of meat and meat products that are spoiled, beyond their expiration date, or otherwise unfit for human consumption. There are no official or reliable estimates of the volume of this material that is generated on an annual basis. The survey identified 54 rendering plants (all of them independent) that process these scraps, and they processed a combined volume of 1.92 billion pounds of this material in 2010.

Another important service provided by many renderers is the collection of used cooking oil from foodservice operations. The volume of restaurant grease collected exceeded 2.4 billion pounds in 2010, but has declined from more than 2.66 billion pounds in 2005. Some of this decline could reflect the economic recession as well as the sharp increase in vegetable oil prices that has occurred since 2007. The potential total volume of used cooking oil from foodservice operations is estimated at 4.7 billion pounds if all was collected.

Grease Theft

Renderers report that theft of used cooking oil, or restaurant grease, directly from foodservice facilities (i.e., prior to pickup by the renderer) is an increasing problem. For many reasons, restaurant grease can be an easy target for theft. Neither restaurant establishments nor law enforcement officials are likely to take aggressive measures to ensure that this property is collected by the intended owner, particularly since from the perspective of the restaurant this material is viewed simply as waste that they are happy to have removed from their premises.

Stolen restaurant grease could be resold either to competing renderers or to biofuel manufacturers, presumably on a cash basis and without the need for verification of its source. While many of the thefts could involve small volumes collected by unsophisticated, individual operators, there is also the possibility that larger, more organized groups or entities account for a significant volume of stolen grease.

Among the firms in the survey that are engaged in restaurant grease collection and recycling, all reported at least some volume of grease is stolen prior to pickup, ranging from minimal to upwards of six million pounds annually. Main findings from the survey include:

- The annual volume of stolen grease is estimated to equal about 7.9 percent of the volume currently collected, or around 190 million pounds. This equates to about 78,500 metric tons of the finished product referred to as yellow grease. Assuming an annual average price of $500 per metric ton, this represents more than $39 million in lost revenue to targeted firms.
- Grease theft often results in some damage to the equipment used to store and secure the grease on-site. The median annual value of equipment damage experienced per plant is $8,750, ranging from under $1,000 to over $500,000 annually. Across all plants, the total annual cost of equipment damage from grease theft is estimated at $3.26 million.
- The majority of plants (78 percent) report that they become the owner of the grease at the time it is placed in the container. The balance (22 percent) report that they do not own the grease until it is picked up by the renderer.
- Incidents of grease theft have been increasing steadily over at least the past five years. Based on the number of thefts reported during the first half of 2010, the total number of theft incidents for the entire year likely exceeded 5,400; up 8.1 percent from the previous year and more than double the number reported in 2005.
- The majority of thefts go unreported to law enforcement, and among those for which criminal charges are filed, relatively few result in successful prosecutions.

Dead Stock

The U.S. Department of Agriculture (USDA) estimates cattle mortalities to be about four million per year. In addition, every year more than 200,000 cattle and calves are condemned and/or non-ambulatory prior to slaughter and therefore cannot be processed for human food.

The North American rendering industry has always played an important role in disposing of this material unfit for human consumption, processing it along with all other raw materials into feed ingredients for non-ruminant livestock as well as into fats and greases used widely by the agricultural and industrial sectors. The environmental benefits of recycling this material as opposed to disposing of it by other means are obvious, particularly given that the most common alternatives would tend to involve burial, incineration, or composting, each of which includes potentially significant risks to groundwater, human and animal health and disease transmission, or air quality.

The survey indicates a sharp reduction in the volume and percentage of dead stock cattle and calves rendered since 2005, falling to just over one million estimated for 2010, down from nearly 1.9 million in 2005. As a result of increased regulation preventing the use of some of these materials in feed, and the negative economics of handling small volumes, today there are only 22 rendering plants that still accept all dead stock cattle and 24 that still accept calves. Across all species of livestock, the survey estimates that approximately 2.1 billion pounds of livestock that die prior to slaughter are rendered, with dead stock swine accounting for the largest share – about 43 percent of the total dead stock volume (all species) processed by renderers —followed closely by dead stock cattle. Poultry accounts for about 17 percent of the total on a volume basis.

Product Markets

Protein Products

The rendering process results in the production of nearly equal volumes of fats and proteins, reflecting the typical composition of the raw material stream. The primary protein product produced is MBM, but its characteristics, use, and market value can vary based on the raw material from which it is derived. Common types of MBM include ruminant-based, non-ruminant mammalian (which is typically derived from swine by-products and often referred to as porcine MBM),

Continued on page 60

poultry by-product meal, feather meal, and fish meal. Mixed MBM could include material from several species including ruminants, so for marketing purposes its use is limited to applications for which ruminant MBM is allowed. In addition to MBM, when feasible, blood is processed separately to produce blood meal, which can be characterized as either ruminant blood meal or non-ruminant mammalian blood meal. Various other protein-based products are produced in smaller quantities to serve niche markets, including gelatin and cooked meat for use in pet foods.

The vast majority of rendered protein products are used in livestock and poultry feed rations, as well as pet food. Rendered products are especially valuable to the livestock and feed industry because of their high protein content, digestible amino acid levels (especially lysine), mineral availability (especially calcium and phosphorous), and relatively low cost in relation to their nutrient value. There are few close substitutes for animal proteins in most rations. For most feeding applications, animal proteins provide the lowest cost nutrient balance compared to plant-based or synthetic alternatives.

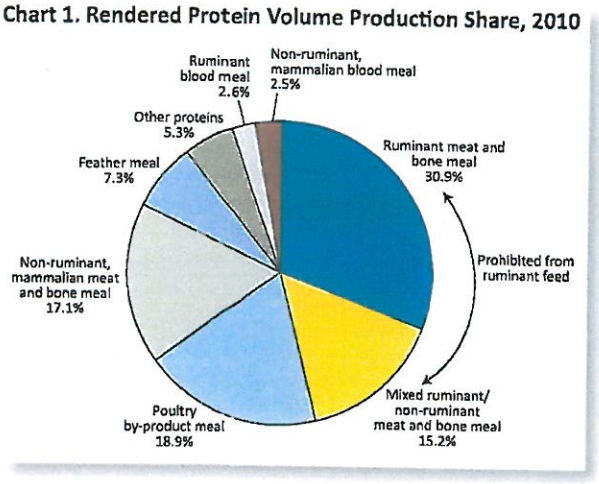
In some specialty applications, animal proteins offer advantages that are very difficult to reproduce. For instance, blood meal is highly valued for its content of by-pass protein and its ability to deliver essential amino acids that are not broken down in the rumen. Hence it is used heavily by the dairy industry both in milk-replacers for calves and as a feed supplement for lactating cows. It is also used in various animal starter rations to promote growth.

Table 1 reports 2010 estimates of rendered protein production by type, which the survey estimates to total over 9.2 billion pounds. Reflecting the composition of the raw material stream, ruminant MBM accounts for the largest share of production (more than 30 percent of the total), but the 1.4 billion pounds of mixed MBM produced (15.2 percent of the total) means that more than 45 percent of all rendered protein products are prohibited from use in ruminant livestock feed.

Poultry-derived protein meals account for the second largest product category, including more than 1.7 billion pounds of poultry by-product meal and 673 million pounds of feather meal. Non-ruminant mammalian MBM, which in the survey consists entirely of porcine MBM, accounts for approximately 17 percent of total protein meal production. Blood meals are a relatively small, but highly valuable, segment of the protein meal production stream, and production is nearly equally split between ruminant-based and non-ruminant (i.e., porcine) varieties, which combine to about five percent of all protein meal production.

Across all types of rendered proteins, the greatest share of these products is used in poultry feed, which consumes significant quantities of each type of protein and accounts for 39 percent of total rendered protein usage. The pet food market is the second largest outlet for rendered proteins with a 31 percent share, and while it consumes no blood meal, it is the largest market for both poultry by-product meal and non-ruminant mammalian MBM. Cattle feed accounts for a relatively small share of all rendered proteins, but it is the largest user of blood meal and consumes significant quantities of feather meal.

Chart 1. Rendered Protein Volume Production Share, 2010



Fats, Greases, and Tallow Products

Total fat production by the rendering industry is supplemented by the inclusion of restaurant grease in the raw material streams of many renderers, which is largely vegetable-based used cooking oil and is converted directly to yellow grease. The rendering industry produces many types of fats and greases that differ based on the level of processing and purification (including whether or not they are approved for human food, i.e., edible) and the type of feedstock from which they are derived.

Primary categories include:

- animal fats derived as by-products from animal processing facilities (edible products must be approved by USDA, and in all cases, the term edible only refers to approval for use in human food; all of these fats and greases are edible for livestock and pets, even if they are labeled inedible for the purpose of human food);
- edible and inedible tallow processed mainly from cattle;
- lard (edible) and choice white grease (inedible) processed from swine;

Table 1. Volume Production of Rendered Proteins, 2010

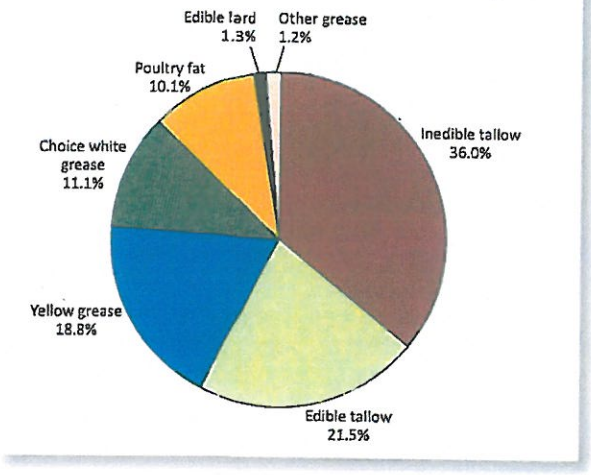
Type of Rendered Protein Product	000 pounds
Ruminant meat and bone meal	2,853,257
Poultry by-product meal	1,744,176
Non-ruminant mammalian meat and bone meal	1,580,518
Mixed ruminant/non-ruminant meat and bone meal[1]	1,403,261
Feather meal	673,147
Other proteins[2]	491,209
Ruminant blood meal	240,150
Non-ruminant mammalian blood meal	234,162
Total	**9,219,879**

1. Considered as ruminant meat and bone meal for use in livestock feed.
2. Includes fish meal, gel bone, raw meat for pet food, lamb meal, and other specific items identified by individual renderers.

- poultry fat (inedible) processed from poultry; and
- greases derived from animal and vegetable oil. Yellow grease (inedible) is manufactured from used cooking oil and other fats and oils collected from commercial or industrial cooking operations. Renderers filter out the solids and heat the used cooking oil to reduce moisture content until it meets industry specifications for yellow grease.

Unlike rendered proteins, which are used almost entirely in livestock feed and pet food, rendered fats and greases have many important non-agricultural uses. The oleochemical industry is a major user of animal fats for the production of lubricants, soaps and detergents, inks, personal care items, and hundreds of other products, and they are also used in biofuels production. However, the livestock industry is still the largest single market for these fats and greases, and if pet food markets are included, use of these products for animal feed accounts for about 50 percent of total production.

Chart 2. Animal Fats and Tallow Production Share, 2010



Livestock Markets for Rendered Fats

Fats are an important component of all diets, and rendered animal fats offer important nutritional and functional properties to livestock feed rations. Fats are extremely calorie dense and also perform many indispensible functions related to cellular activity, disease prevention, and the storage and absorption of certain essential vitamins. And, the addition of fats tends to increase the palatability of livestock feed while also making the feed less dusty and easier to handle. Rendered fats are used in the feed rations of all livestock species and are typically the primary source of added fat to most rations. Yellow grease is likely the most common type of plant-derived fat added to feed rations.

Among the different livestock sectors, the largest proportion of rendered fat is used by the poultry industry, which accounts for about one-half of the volume used for animal feed (excluding pet food). The cattle and swine industries consume nearly equal amounts and account for nearly all of the remaining 50 percent of the volume used in feed rations, but minor quantities are also used in aquaculture feed rations and rations for other species.

Biofuel Markets for Rendered Fats

Survey estimates found that the production of biofuels consumes more than 510,000 U.S. tons (about one billion pounds) of rendered fats and greases, accounting for roughly 10 percent of total production of these materials with inedible tallow and choice white grease the most widely used for this purpose.

Animal fat-based biodiesel feedstocks offer strong greenhouse gas (GHG) advantages over all vegetable-based alternatives (the Environmental Protection Agency estimates GHG savings relative to petroleum of 86 percent from rendered oils, fats, and greases compared to 57 percent savings from soybean oil), and production of animal fats is not associated with indirect land use changes in the way that could result in reduced GHG savings from even higher production of vegetable-based oils. As a result, biodiesel from rendered oils, fats, and greases qualifies directly as an advanced biofuel (GHG savings greater than 60 percent), and its low-carbon status will likely support wider production in the future for blending with vegetable-based oils to achieve targeted GHG reductions. **R**

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For the Business

Food service establishments (FSEs) in Roseville generate a tremendous amount of fats, oils and grease (FOG) everyday by preparing and serving food to thousands of customers. If not properly disposed, FOG from cooking can damage and even clog Roseville's sewer system, causing a sewer overflow. Clogs and overflows can create smelly, dirty messes and potentially damage your business, property, profits and harm the environment. However, by properly disposing of FOG, FSEs can help protect the environment, save money on sewer utilities and avoid expensive cleanup costs from sewer backups.

To report a sewer overflow, please call 774-5750 immediately.

Resources for Businesses

Food Service Establishment - FOG Permit Application

Water Quality Checklist

Employee Training Log

Grease Interceptor Cleaning Record

New Restaurant Checklist

Quicklinks

Frequently Asked Questions

Fats, Oils and Grease Ordinance

More information on Fats, Oils and Grease and State Waste Discharge Requirements

South Placer Regional Wastewater and Recycled Water Systems Evaluation

Six tips to becoming a restaurant that has a good record on FOG handling and disposal

1. Implement Best Management Practices (BMP's) all the time.

2. Maintain grease interceptors at recommended frequencies and keep good maintenance documentation.

3. Keep your trash enclosure clean and in good order at all times.

4. Implement frequent employee training on FOG handling and disposal, as often as quarterly or as needed; and keep records of the

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BMP Sheets - Why is a Fats, Oils and Grease Program Needed?

Break Room Posters - Proper Grease Disposal #1

Break Room Posters - Proper Grease Disposal #2

BMP Sheets - Requirements for New and Remodeled Food Service Establishments

BMP Sheets - Proper Disposal of Fats, Oils and Grease in the Kitchen

BMP Sheets - How to Recycle Kitchen Grease

BMP Sheets - Selecting a Grease Hauler

BMP Sheets - Licensed Grease Haulers

BMP Sheets - Grease Interceptor Maintenance #1

BMP Sheets - Grease Interceptor Maintenance #2

BMP Sheets - Grease Removal Devices

BMP Sheets - Grease Removal Device Manufacturers

BMP Sheets - Grease Trap Maintenance

BMP Sheets - Dumpster Maintenance

BMP Sheets - Equipment Cleaning

Frequently Asked Questions

Are fats, oils and grease a problem?

Yes. Fats, oils and grease (FOG) cause serious problems in the sewer system pipes. It sticks to the sewer pipe walls and restricts the wastewater flow, which can cause blockages that could result in sewer overflows. This requires pipes to be cleaned more frequently and may cause some pipes to be replaced sooner than expected. Clogs and overflows can create smelly, dirty messes - possibly damaging your business, property, profits, as well as the environment.

What types of products contain fats, oils and/or grease (FOG)?

Cooking oils, salad dressings, sandwich spreads, meat, lard, shortening, dairy products, sauces, butter/margarine, are just some examples.

Why should my business be concerned about keeping fats, oils and grease out of the sewer?

training.

5. Have a FOG spill plan both inside and outside the kitchen.

6. Have emergency response numbers easily accessible in cases of sewer system overflows.

Doing all you can to prevent grease-related sewer blockages and overflows benefits your business, your pocketbook and the environment by:

- Avoiding expensive clean-up costs and penalties
- Avoiding the loss of business due to a sewer back-up
- Keeping the environment clean

What can I do to keep fats, oils and grease out of the sewer system?

- Train employees on the proper disposal of FOG and the hazards of washing FOG down the drain.
- Post Proper Disposal of FOG Best Management Practices signs near sinks and dishwashers.
- Wipe or scrape pots, pans, dishware and work areas into trash to remove FOG and food residues before washing.
- Use mild water temperatures (120 F to 140 F) in all sinks, especially in pre-rinse sinks.
- Install or use easily cleaned and removable drain screens in all sink drains, floor drains, kitchen sinks, mop sinks and hand sinks to capture solid materials. The screen openings should be 1/8" to 3/16".
- Clean exhaust hood filters in sinks, not outside.
- Block off sinks, floor drains or storm drains near any FOG related spill and clean up using absorbent materials, such as absorbent sweep or paper towels. Place used materials in a separate sealed bag before placing it in the trash.
-Prevent outdoor spills and overflows from entering the storm drain by creating a barrier using dirt or other absorbent material to contain the spill or overflow until all grease is cleaned.
- Frequently clean indoor grease traps and, when possible, supervise all cleaning and maintenance of outdoor grease interceptors to ensure the devices are properly maintained.

What is a grease removal device?

Grease removal devices separate grease from wastewater before it enters the sewer. Wastewater enters the grease removal device from kitchen drains and is slowed down so solids can settle to the bottom. Grease, being lighter than water, floats to the top, and must be removed from the device regularly. Proper maintenance of grease removal devices prevents FOG from going down the drain, clogging pipes and potentially causing a sewer overflow in the restaurant.

What type of grease removal device do I have and where is it located?

There are two types of grease removal devices, one is a large outdoor underground grease interceptor and the other is a smaller indoor grease trap. The large outdoor grease interceptors are generally made out of concrete and located under manholes outside the restaurant. The smaller indoor grease traps are boxes that are generally located in the sink area, either above ground or in the floor. Outdoor grease interceptors should be pumped completely at least every three months. The greasy content of the

interceptor is known as "brown" grease and is generally disposed at a wastewater treatment facility, but may become part of renewable energy sources in the future. Grease traps should be maintained daily or weekly depending on the type of the trap, whether you are following the proper disposal of FOG best management practices, and type and quantity of food served.

Is there a difference between grease traps and grease interceptors?

Both devices help decrease the amount of FOG that enters sewer lines by separating and retaining FOG. Even though the two terms are often used interchangeably, grease traps are smaller indoor units found either under the sink or in the floor and grease interceptors are larger outdoor underground devices that can trap more FOG for longer periods of time before it enters the sewer. Grease interceptors are the most effective removal devices for food service establishments (FSEs).

How often should I have my grease interceptor serviced?

Have the interceptor pumped out completely at least once every six months. When possible, supervise all cleaning and maintenance of grease interceptors to make sure all FOG (liquids and solids) are removed from the interceptor after pumping. Please note: it is the FSE's responsibility to ensure their grease interceptor is operating properly, being maintained and serviced as needed.

Do I need to install a grease interceptor?

New FSEs and remodeled FSEs may be required to install a grease interceptor. Refer to the City of Roseville for assistance.

What if I don't have a grease removal device installed at my food service establishment?

If your FSE does not have a grease removal device then it is recommended that you install one.

Photo courtesy of Sacramento County Regional Sanitation District

City of Roseville 311 Vernon Street, Roseville, California 95678 (916-774-5200)

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DEPARTMENT OF FOOD AND AGRICULTURE
MEAT, POULTRY AND EGG SAFETY BRANCH
ECONOMIC IMPACT ASSESSMENT

SUBJECT MATTER OF PROPOSED REGULATIONS

Transporters of Inedible Kitchen Grease

SECTION(S) AFFECTED

Sections 1180.1, 1180.3.2, 1180.20, and 1180.24

SPECIFIC PURPOSE OF EACH ADOPTION, AMENDMENT, OR REPEAL

This proposal is necessary to clarify the requirements for transporters of inedible kitchen grease pursuant to sections 19310 and 19316.5 of the Food and Agricultural Code. Inedible kitchen grease is defined in Food and Agricultural Code section 19216 as meaning any fat or used cooking greases and oils obtained from any source. This proposal will establish a new manifest tracking system and procedure; designate the authorized facilities that may receive interceptor grease; sets forth reporting time frames, records retention requirements and makes technical changes as specified.

Existing law, Food and Agricultural Code section 19305 authorizes the Department of Food and Agriculture (Department) to inspect and investigate shipments and transactions of renderers, collection centers and transporters of inedible kitchen grease.

Food and Agricultural Code sections 19310 through 19317 sets forth the requirements for transporters of inedible kitchen grease that transport grease from restaurants and any food preparation, processing, or handling establishment or facility.

Existing regulations specify the licensing and registration requirements for transporters of inedible kitchen grease; however, no regulations exist to establish a tracking system in accordance with Food and Agricultural Code section 19316.5. This proposal amends those requirements and establishes new manifest tracking system under Articles 37, 37.1, and 42 of Subchapter 2, Chapter 4, Division 2 of Title 3 of the California Code of Regulations, and makes other technical changes as specified.

Based on an initial evaluation, the Department does not believe the proposed regulations are inconsistent or incompatible with existing state or federal regulations.

BUSINESS IMPACT

The Department has determined that this regulatory proposal will not have any impact on the creation of jobs or businesses or the elimination of jobs or existing businesses or the expansion of businesses in California.

The Department has made an initial determination that the proposed regulatory action will have no significant statewide adverse economic impact directly affecting California businesses including the ability of California businesses to compete with businesses in other states.

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The Department has made an initial determination that this regulatory proposal will impact transporters of inedible kitchen grease. The Department's proposal affects small businesses. The anticipated compliance requirements for businesses are as follows:

- There are approximately 393 registered transporters of inedible kitchen grease.

- Paperwork requirement: The Department is establishing a new form, MPES Form 79-120 (Est. 03/12) Manifest-Inedible Kitchen Grease Transport. The transporter of inedible kitchen grease may generate a form for their use, or an electronic version, as long as all the required information is included. The form requires verification of the content of the load when it is delivered to the receiver of the grease waste. This can be a weight or volume determined at the receiving facility or a weighmaster certificate from a scale.

- Record keeping requirement: Persons engaged in the rendering industry, including businesses that are registered to transport inedible kitchen grease are required to keep certain records as specified in existing statutes and regulations. This proposal requires the MPES Form 79-120 (Est. 03/12) or the transporter generated form to be kept for at least two years. The Department believes this requirement does not adversely affect businesses or small businesses engaged in transporting inedible kitchen grease in California because the two-year requirement is consistent with Food and Agricultural Code section 19303. This requirement is not anticipated to incur increased costs to businesses as record keeping is a standard business practice for persons engaged in the grease waste and/or rendering industry in California. The maintenance of records will assist the Department in ensuring the legal, safe, sanitary disposal of grease waste in California.

- Reporting requirement: None. However, State investigators and law enforcement officials may review completed manifests and records in the course of investigations or periodic audits. Food and Agricultural Code sections 19303 and 19313.1 provide authority for IKG transporters, collection centers, and renderer record keeping requirements.

Estimated costs for a business to comply with specified provisions of this proposal		
If the IKG transporter uses the Department's manifest form	$.50/form (printing/handling/shipping) 21-stop route requires 7 forms per day 35 forms per week @ $.50	$17.50
If the IKG transporter mails receipts to the generator (e.g., restaurant/food facility)	U.S. First Class postage rate @ $0.45 21 receipts x 5 days per week = 105 receipts	$47.25
Office clerical support to file the receipts	$15.00 @ 2 hours per week	$30.00
	Total estimated cost per week:	$94.75
Note: Transporters may not incur costs each week depending upon their business practices. Transporters may use their own form or an electronic form providing it contains the same information as the Department's form as specified in this proposal. The transporter may leave the receipt with the generator at the time of removal of the grease waste or mail the receipt to the generator.		

BENEFIT OF PROPOSED REGULATIONS:

This proposal is intended to enhance consumer protection by instituting a tracking system to record the proper and legal removal, transport and disposal of inedible kitchen grease. Inedible kitchen grease, if not properly disposed or recycled can cause blockages in public sewer systems or streams that could adversely affect human health, worker safety, and the environment.

ECONOMIC IMPACT ASSESSMENT CONCLUSION:

The Department of Food and Agriculture (Department) has made an initial determination that the proposed regulatory action would have no significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states. This initial determination is based on the fact that the proposed regulation imposes a new form and procedure to track grease waste removal; however, transporters of inedible kitchen grease are not required to use the Department's forms, but may use their own forms or electronic versions of the form. As part of its economic impact assessments, the Department has determined that its proposal will not affect the ability of California businesses to compete with other states by making it more costly to produce goods or services, that it will not create or eliminate jobs or occupations, and the proposal will not affect the ability of California businesses to compete with other states by making it more costly to produce goods or services. The Department's proposal does not impact multiple industries.