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REPORT TO GANGES SEWER LOCAL SERVICE COMMITTEE
MEETING OF THURSDAY, 15 MAY 2008

SUBJECT **FATS, OILS AND GREASE AND SCREENINGS DISPOSAL FROM GANGES SEWER SYSTEM**

PURPOSE

To advise the committee of a need to develop a disposal strategy, in concert with the Salt Spring Island liquid waste disposal local service, for fats, oils and grease from restaurant grease traps and the need for a long term strategy for screenings disposal from the Ganges wastewater plant.

BACKGROUND

The Capital Regional District (CRD) has developed, within it source control program, a requirement for grease traps to be installed on all restaurants in the Ganges Village core. The program mandates capture of grease before it enters the sewer collection system and wastewater treatment plant. The program was implemented and is enforced in Ganges to reduce the likelihood of blockage in the system. A short time back the lower commercial area was flooded due to a blockage. As a consequence of the program, restaurant grease traps are pumped out by the septage hauler approximately once per month and hauled to the Burgoyne septage facility for disposal. The material has proven to be a unique disposal problem for the dewatering facility and a strategy needs to be developed to exclude the material from the dewatering process, or to modify the facility to accept the material.

The CRD currently disposes of screenings material from the Ganges wastewater plant to the Burgoyne septage facility. This material has been added to the dewatered material to be trucked to the Hartland landfill in the past however with the proposed composting project now in the planning stages, an alternate strategy for the disposal of the material will be necessary.

DISCUSSION – GREASE REMOVAL

Ganges System Benefits

The grease removal program has considerable value to Ganges. Exclusion of the material from the system reduces considerably the maintenance requirements for the collection system. In some areas of Greater Victoria, sewer cleaning to remove grease is a regularly scheduled maintenance task performed with specialized equipment. Abandoning the policy of removal is not considered a viable alternative. At this time the restaurant owner pays the cost for removal. It is not a cost to the sewer local service area.

Dewatering System Problems

The grease trap material, by its nature, varies in consistency and makeup with each load depending on which traps are pumped, the design and size of the trap and restaurant operation. The acceptability of the material on site is further dependent on the air temperature and the volume and composition of other material received before and after the material delivery. The worst conditions appear to be in the winter months when temperatures are lowest, when grease solidifies on the cold components and remains congealed and hence does not mix with septage or sludge already in the system. The material during these times is a physical handling problem, disrupting the press operation and increasing manpower expenditures and results in a much more liquid end product.

Handling Options
The material could be trucked by the hauler to the regional disposal operation on Vancouver Island, however such an action would be contrary to the CRD bylaws. CRD itself could batch the material for transport to the regional site under the bylaw; however this action would be contrary to the policy of dealing with Salt Spring Island waste on island. It would appear the most appropriate means to handle the material is to establish a side stream process at the septage receiving site. Staff are in the process of developing a long term upgrade plan for the dewatering site, which will also provide for composting the septage / sludge material. It is suggested that the grease handling become a component of this plan. It may be possible to preprocess the grease material, and blend it into the mix separately without impact on the dewatering process, or it may be possible to find a beneficial use for the product outside of the facility (biodiesel). In either case it is likely the additional processing will be an additional cost for capital works and an additional cost for operation. Staff will also be reviewing this issue with the Salt Spring Island Liquid Waste Disposal Local Service committee later this month. Staff will recommend the two committees meet to consider a strategy for dealing with this material.

DISCUSSION – SCREENINGS DISPOSAL

The disposal of screenings from wastewater plants will be an issue for the Maliview wastewater treatment plant, the future Channel Ridge wastewater plant and ultimately the liquid waste dewatering facility by year-end. The material is composed of plastics, rag and some organic components which are not desirable in the compost facility. The material would normally be disposed of to the landfill, however it is not clear whether or not it could be bagged in a fashion where it could be accepted at one of the solid waste transfer stations or whether it will need to be hauled directly. Staff will review options and present a strategy and costs to the committee at budget time.

ALTERNATIVES

1. That the committee receive this report for information and agree to meet with the Salt Spring Island Liquid Waste Disposal Local Service committee to review options for a partnership to handle FOG from Ganges restaurants, and screenings, from wastewater sources, at the Burgoyne septage dewatering site.

2. That the committee agree it will seek options for disposal of the material outside of the liquid waste processing service.

FINANCIAL IMPLICATIONS

The cost for grease removal from the Ganges sewer system and its disposal are not currently a cost to Ganges but benefits the area through reduced maintenance of the collection and treatment system. If the Ganges sewer area wishes to participate with the Salt Spring Island liquid waste function to dispose of this material, it is likely the sewer area will see additional costs for the upcoming budget year. There is also a need to handle waste screenings from the Ganges and other wastewater plants which, at the present time, is received at the septage site for transfer to the Hartland Landfill. This practice will terminate once the pilot compost operation is underway. There will be additional costs for a new program for the 2009 budget year, which will likely be shared with other sewer services on the island.

SUMMARY/CONCLUSIONS

The CRD has developed, within its source control program, a requirement for grease traps to be installed on all restaurants in the Ganges Village core. The program is to capture grease before it enters the sewer collection system and sewage treatment plant. As a consequence of the program, restaurant grease traps are pumped out by the septage hauler approximately once per month and hauled to the

Burgoyne septage facility for disposal. The material has proven to be a unique disposal problem for the dewatering facility and a strategy needs to be developed to exclude the material from the dewatering process, or to modify the facility to accept the material.

Wastewater screenings, currently received at the Burgoyne septage disposal site, will present a problem for disposal once the pilot compost operation is underway. A new strategy will need to be developed by the various wastewater services on the island.

RECOMMENDATION

That the Ganges Sewer Local Service committee accept this report for information.

Gary Hendren, AScT
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