

## **12 Solid Waste Issues**

Some of the actions proposed under the Long-Term Plan might generate soil waste. Therefore, the Long-Term Plan and its alternatives will each be discussed to determine if any significant environmental impacts may arise from waste management.

### **12.1. Long-Term Plan**

The public education and outreach programs, especially the use of printed materials for public outreach, have the potential to generate solid waste. However, in the context of County-wide solid waste generation in the 1.8 million tons per year vicinity in the County as a whole (Tonjes and Swanson, 2000), the production of even several hundred thousand brochures is negligible. In addition, the brochures would be paper, and each Suffolk municipality not only has a law specifying that paper is a mandatory source separation material, but each has some form of recycling program in place for this material (Tonjes and Swanson, 2000). Therefore, no significant impacts are to be expected.

Surveillance programs have no explicit link to the generation of solid wastes.

Source reduction may increase the generation of solid wastes. Two elements in particular, increased efforts to manage tires, and increased emphasis on storm water structure maintenance, may increase waste management efforts.

Tires in particular are difficult materials to manage. There are generally no local management options, as they are not supposed to be disposed through incineration or local landfilling (6NYCRR Part 360). Nationally, approximately 40 percent of all collected tires are used a fuel for various processes, often for the manufacture of cement. Approximately 12 percent of collected tires are used as fills or other civil engineering uses, 12 percent are recycled as ground rubber, 10 percent are landfilled. Approximately 12 percent have unknown disposition, and minor uses comprise the fate of the remaining tires (Blumenthal, 2003). Therefore, the collection of additional tires from littering and illegal disposal should not lead, necessarily, to increases in stockpiled tires, as it seems likely that fewer tires have that fate currently. Tire stockpiles can be the source of mosquito problems, and also represent serious fire threats. Again,

in the context of an estimated 1.5 million tire annual generation rate in Suffolk County, additional efforts to recover tires from the woods, lots, and backyards of the County are not likely to represent a significant increase in the overall tire waste stream. It should be noted that the cost of managing tires is generally much more than other elements of the waste stream. An as-yet unpublished report by CA found tires generally cost at least twice as much for disposal for municipalities on Long Island than does regular solid waste.

Maintenance of stormwater structures generally reduces the probability that they will harbor mosquitoes in Suffolk County (CA-CE, 2005a; CA-CE, 2005b). Stormwater structure maintenance is generally not very complicated, and mostly consists of removing material that has accumulated in the structure and either blocks or clogs it, preventing or slowing drainage (Brzozowski, 2004). These materials are generally fine materials, and may be contaminated by the kind of contaminants associated with road run-off (Hayes et al., 2003). NYSDEC has recognized that this represents a problem in terms of identifying appropriate disposal options. Current regulations do not specifically identify means that are acceptable for the management of street sweepings and these stormwater structure fines. For options other than disposal in a landfill, NYSDEC has been requesting an analysis of the potential impacts on a case-by-case basis (S. Farkis, NYSDEC, personal communication, 2003). Therefore, increases in the frequency and level of effort for stormwater structure maintenance may cause a waste disposal issue for those municipalities in the County without ready access to the Brookhaven or Islip landfills. The mitigation for this apparent problem is that better maintained stormwater systems should result in less risk of mosquito-borne disease, and also result in better stormwater management.

Water management projects should not result in any solid waste generation of note. Initial discussions with NYSDEC regarding the Wertheim demonstration project included recognition that some form of soil balance is required for these projects, as the export or import of material is not desirable.

When a water management project involves the removal of old dredge spoils (BMP 15), some consideration regarding the management of the materials will need to be made. In nearly all cases, some form of upland use will be likely, as the spoils will have been in place for some time,

and are unlikely to be considered an environmental problem. Most upland use issues for many dredge spoils focus on dewatering problems, which no longer is an issue with these materials. Contamination testing may be required, however. The mitigation of this apparent problem is the ecological rehabilitation of the old spoil site, and the reduction of mosquito breeding (with its ancillary human health benefits, in many cases).

Biocontrol use is unlikely to cause any form of solid waste issue.

Pesticide use for larval or adult control does have ancillary waste management issues. However, as discussed in Section 2, the labels for each pesticide specify disposal options for unused product and empty containers. Under the Long-Term Plan, pesticide use is expected to decrease sharply, meaning that this impact will be reduced. Currently, the predominant effect locally is expenses associated with paperwork and the use of regulated disposal companies. There are many people who believe that there are impacts from the disposal of these materials through incineration or landfilling at a hazardous wastes facility, although the licensing of these facilities through Federal regulations, generally expressed through delegation of authority to the states, suggests that the impacts have been found to be acceptable by USEPA.

Other aspects of the Long-Term Plan (administration, etc.) are unlikely to generate solid wastes. The one obvious candidate for solid waste impacts, the potential construction of a BSL-3 laboratory, will require a separate environmental assessment when its plans are more complete.

## **12.2. Other IPM Alternatives**

The existing program (the no action alternative) is likely to generate less solid waste, overall, than the proposed Long-Term Plan. This is because the Long-Term Plan proposes augmenting public outreach efforts extensively, will have more reporting associated with it, and has emphasized tire collection and stormwater structure maintenance as source reduction efforts. However, the existing program uses more pesticides than the Long-Term Plan proposes to use, and so the existing program is likely to generate more waste pesticide and pesticide containers. Overall, the differences are not great, however.

None of the pesticide alternatives or water management alternatives is likely to change the overall generation of solid waste.

Management alternatives that decrease pesticide use (use of Mosquito magnets at Davis Park, and the various proposed restrictions on adulticide use) may decrease, slightly, the generation of pesticide containers and excess pesticides requiring disposal. The proposed avoidance of methoprene use and fresh water larviciding, as discussed in Section 8, could actually lead to greater usage of adulticides, and so it is not clear that any solid waste reductions would accrue.

### **12.3. No Mosquito Control**

The absence of an organized mosquito management program on the County level could reduce generation of solid waste, by avoiding all of the wastes generated under the program elements discussed above. It is far from clear that any environmental benefits that might ensue outweigh the impacts of the lack of a management program discussed in Sections 9 and 10.

## Section 12 References

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- Tonjes, DJ, and RL Swanson. 2000. How do we measure it? Lessons from Long Island on computing recycling rates. *Journal of Urban Technology* 7(3):63-80.

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