

CHAPTER 3.V

MITIGATION

A. NATURAL RESOURCES

Potential significant adverse impacts on crustaceans in inlet bays, such as Jamaica Bay and Little Neck Bay which receive drainage (stormwater runoff) from large land areas, were predicted if rain occurs after application of malathion and it drains into the bays. The results of the modeling are intended to yield conservative estimates of the potential active ingredient levels in the water bodies. The City would conduct monitoring for pre- and post-application of malathion in tributaries to these waterbodies should malathion be selected for application at some time in the future on the land area draining into these bays. Post-application monitoring would also be applied if it rained within one week of the application of malathion in the sections of Brooklyn and Queens where the malathion had been applied. If the measured levels of malathion are as large as those estimated for the runoff in this EIS, these impacts would occur and remain unmitigated.

If malathion is selected in the future for land areas that drain into Jamaica Bay, these impacts may be lessened, once completion of the combined sewer overflow (CSO) holding tank at Paerdegat Basin is fully constructed (which will reduce the direct discharges into the bay after rainfall).

NYCDOH may elect to apply the active ingredients in smaller droplet sizes (e.g., average mean diameter less than 30 microns) in these areas, because studies in other parts of the country have shown that smaller droplet sizes substantially reduce the amount of the active ingredient that reaches the ground and, therefore, less would run off if a rain event occurs after the application. Also, application by aircraft with smaller droplets would also reduce the potential for runoff into such inlet bays.

B. WATER QUALITY

Potential significant adverse water quality impacts from the *Mosquito-Borne Disease Control Program* were predicted from the application of malathion. The water quality standard (0.1 µg/L for certain classes) for this active ingredient would be exceeded in storm water runoff for short time periods after spray events. Malathion water quality standards could be exceeded for short periods of time (e.g., rainfall immediately after spray event) as a result of the presence of malathion in runoff into streams (i.e., tidal creeks) that flow into larger water bodies, such as Lemon Creek, and inlet bays with large stormwater discharge and limited tidal flushing such as Jamaica Bay and Little Neck Bay. These predicted exceedances of the malathion standard result from conservative projections, and the City would monitor runoff to determine if those concentrations are observed if malathion is applied in the future.

C. NOISE

Potential significant adverse impacts from the *Mosquito-Borne Disease Control Program* were predicted from aircraft and police escort/truck operations. At the quietest locations in New York City, the change in $L_{eq(1)}$ noise levels during nighttime hours would be approximately 5 to 10 dBA, which would be readily noticeable and would be considered to be a significant increase in noise levels. However, both in quiet and even in relatively noisy neighborhoods, peak passby aircraft noise levels during spraying operations would be noticeable, and produce intrusive short-term noise levels at residences. These impacts would result from relatively low-flying aircraft, which would have to fly at limited heights (between 100 and 300 feet) in order for the adulticides to be effective. Therefore, such impacts could not be mitigated.

In addition, each truck would be escorted by a police vehicle with an announcement to warn people about the spraying. This warning vehicle's purpose is to produce announcements that the public can hear and, therefore, it will produce short-term noise levels that are noticeable and may be considered to be intrusive. Noise from the police warning vehicle and an announcement would produce an $L_{eq(1)}$ noise level of at least approximately 50 dBA at 25 feet. Together, the warning police vehicle announcement and the spray truck would produce an $L_{eq(1)}$ noise level of approximately 51.2 dBA at 25 feet. Therefore, at the quietest of locations, with the proposed action, nighttime $L_{eq(1)}$ noise levels would increase from approximately 48 dBA to approximately 53 dBA. This increase in $L_{eq(1)}$ noise levels of approximately 5 dBA would be a readily noticeable change in noise levels, and would be a significant adverse impact. More important, when the police warning vehicle with the blow horn and the spray truck pass, both in quiet neighborhoods and even in neighborhoods that are not particularly quiet, they will produce short-term passby noise levels that are likely to be noticeable and intrusive to residents. Because the function of the police warning announcement is to notify the public and minimize potential direct impacts on the public, the noise impacts from such operations would not be mitigated. 

CHAPTER 3.V	3.V-1
MITIGATION.....	3.V-1
A. NATURAL RESOURCES	3.V-1
B. WATER QUALITY	3.V-1
C. NOISE.....	3.V-2