

July 5, 2017 – City Council update on mosquito control

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- A single female mosquito can lay as many as 3,000 eggs, of which 80% will hatch. Mosquitoes can fly up to 300 miles in search of a blood meal. Mosquitoes are difficult to eradicate without collateral environmental damage, and pesticide effectiveness is debatable in local application. Since we have applied the pesticides over the space of 40 years, mosquitoes may be resistant to the chemicals used in the past.
- The City of Valdez started a Mosquito Program with the City of Fairbanks back in 1977. Fairbanks has long since abandoned its program. The program focused on two different products: a larvicide (BRIQUETS), applied to standing water where the eggs hatch, and a pesticide mist spray (Permanone RTU).
- The larvicide Briquettes must be applied to water and the program is under the control of the Alaska Department of Environmental Conservation (ADEC). The City of Valdez did receive a permit to apply Briquettes, permit Number 15-AQU-02 on May 5, 2015; however this application can only be applied by a certified applicator licensed through the ADEC. Having staff employees that meet this requirement has become costly and very difficult. Currently there are no department employees that have all the certification required to dispense the Briquettes.
- There are few options for ADEC approved spray pesticide in Alaska. Permanone is the spray of choice since other pesticides come with greater restrictions than Permanone. Spraying knocks down the adult population in the immediate area where the pesticide is applied. Pesticide needs to be applied repetitively as new generations are continually hatching. Per ADEC direction, the City can only apply pesticide to City owned property such as streets, parks, and schools. Any pesticide program has to protect non-targeted species including bees. Bees can forage up to one mile away from the hive. Because City owned properties are public areas the ADEC regulations governing school, parks, playgrounds and ball fields are very specific. "Spray Drift" is very hard to control, but the regulations are very specific, spray cannot be allowed drift off of the City-owned property. The City is required to have a letter from adjacent property owners giving specific permission to spray. Violation of any of the regulations carries stiff criminal and financial penalties.

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Other than pesticide, what else can the City of Valdez do to reduce the Mosquito population?

- The City has propane operated mosquito magnets, used in the past, but no exact data as to how effective these were. Propane magnets are labor intensive and expensive to operate, they require the five gallon propane tank to be filled and changed frequently. The magnets use a pheromone attractant to lure the mosquitoes in. The use of the pheromone puts this under the control of the ADEC, using the same restrictions as a pesticide.
- Education of the public: Much of the population of the mosquitoes and biting midges (no-see-ums) could be reduced by good sanitation. Emptying tires and cans of standing water is the number one control suggested by the DEC, as standing water is what they use for breeding areas. This would take the effort of all city residents to be effective.
- Building Maintenance is trying a new mosquito trap that uses UV light to draw in the pest, and then traps them by the use of forced air. We are trying this out and if it is effective we will purchase more of the traps to put in strategic locations. These traps are said to be effective for 1 acre each, so it could be effective for parks, ball fields, and playgrounds.