Introduction

The Pesticide General Permit (PGP) for point source discharges to waters to the state of Utah from the application of pesticides covers any qualified "operator" that meets the eligibility requirements identified in Part 1.C.1 and Part 1.D.1, and if so required, submits a Notice of Intent (NOI) in accordance with Part 1.A.3.

As a Mosquito Abatement (activity covered in Part 1.C.1), the Sevier County Mosquito Abatement & Control SCMA is eligible for the coverage under the PDP. Also, as an "Operator Group 2" defined in Part 1.D.1, the SCMA has to submit an NOI regardless of the size of the area to be treated. The NOI was submitted to the Department of Environment Quality in October of 2016.

The PGP requires any "operator" that is required to submit an NOI and comply with the water quality based effluent limitations to also develop a written Pesticide Discharge Management Plan (PDMP) to document measures taken to meet the effluent limits.

The PDMP requires the following to be documented:

1) Pesticide discharge management team information;
2) Pest management area description;
3) Control measure description; and
4) Schedules and procedures pertaining to control measures used to comply with the effluent limitations

The SCMA must keep the PDMP up-to-date thereafter for the duration of coverage under the PGP. The PDMP may contain other documents to describe how we will comply with the effluent limitations of the permit. A copy of any portions of any documents that we will use must be attached to the PDMP.

You will find in the next pages the description of the different control measures implemented.

Branton Nielson
SCMA Manager

1. **Pesticide Discharge Management Team Information.**

All persons may be contacted at:
Sevier County Mosquito Abatement & Control
2780 S. Mulberry Lane
Richfield, Utah, USA 84701
Tel: (435) 896-6636
Fax: (435) 896-5122

A. Person(s) responsible for managing pests in relation to the pest management area :

Branton Nielson, Manager
Email brantonnielson@sevier.utah.gov
Tel: (435) 896-6636

B. Person(s) responsible for developing and revising the PDMP:

Branton Nielson, Manager
Email brantonnielson@sevier.utah.gov
Tel: (435) 896-6636

C. Person(s) responsible for developing, revising, and implementing corrective actions and other effluent limitation requirements:

Branton Nielson, Manager
Email brantonnielson@sevier.utah.gov
Tel: (435) 896-6636

D. Person(s) responsible for pesticide applications (mix, load, and apply):
Branton Nielson, Manager
Email brantonnielson@sevier.utah.gov
Tel: (435) 896-6636
Darrel Lowe, Field Inspector & Applicator
_____, Field Inspector, Foreman, Applicator
Kole Krahenbuhl, Field Inspector & Applicator

2. Pest Management Area Description

A. General Description and Location:

Sevier County is located in the south central part of the State of Utah and includes a large area around Richfield in the valley of the Sevier River and its tributaries. It is bordered by Wayne County, UT to the east, Sanpete County, UT to the north, Millard County, to the west and the Piute to the south.

The lowest point in the county, along Sevier River, is 5240 feet near the county's central part, while the Beaver, Monroe, Cedar Mountains in the south top 10,000 feet.
The southwest edges of the Fish Lake Mountains are visible to the North of Capital Reef National Park can be seen to the south, and the Pahvant Mountains loom over the city of Richfield to the west. The climate has more in common with the Ski Areas than the rest of the state, with hot summers and mild, mostly snowy winters.

Richfield, the main city of Sevier County, lies in one of the highest elevation region of the state, with most of the city lying above 5,500 feet. The Sevier River flows through the middle of the county. The Sevier River also flows on the east side of the county before merging with Clear Creek to the southwest. The county's southern section, Monroe, Elsinore, Joseph, and Central Valley is more typical of the Mountain Valleys, with pine and quake trees and rich soil dominating the landscape. Richfield lies between the Monroe Mountain region to the east with its neighboring Pahvant Mountains to the west with its broad landscapes and pine forests. Glenwood, Sigurd, Aurora, Salina and Redmond are located to the north of Richfield

Because of the city's high elevation and central location, Richfield and Sevier County is one the coldest parts of the state and has a colder climate with maximum daily July temperatures averaging about 94° F. Richfield lies in mountain valleys and averages 8.57 inches of precipitation annually. Precipitation is fairly evenly distributed throughout the year, except for a dry period from late June through August.

Figure 1. State of Utah with Sevier County in the center.

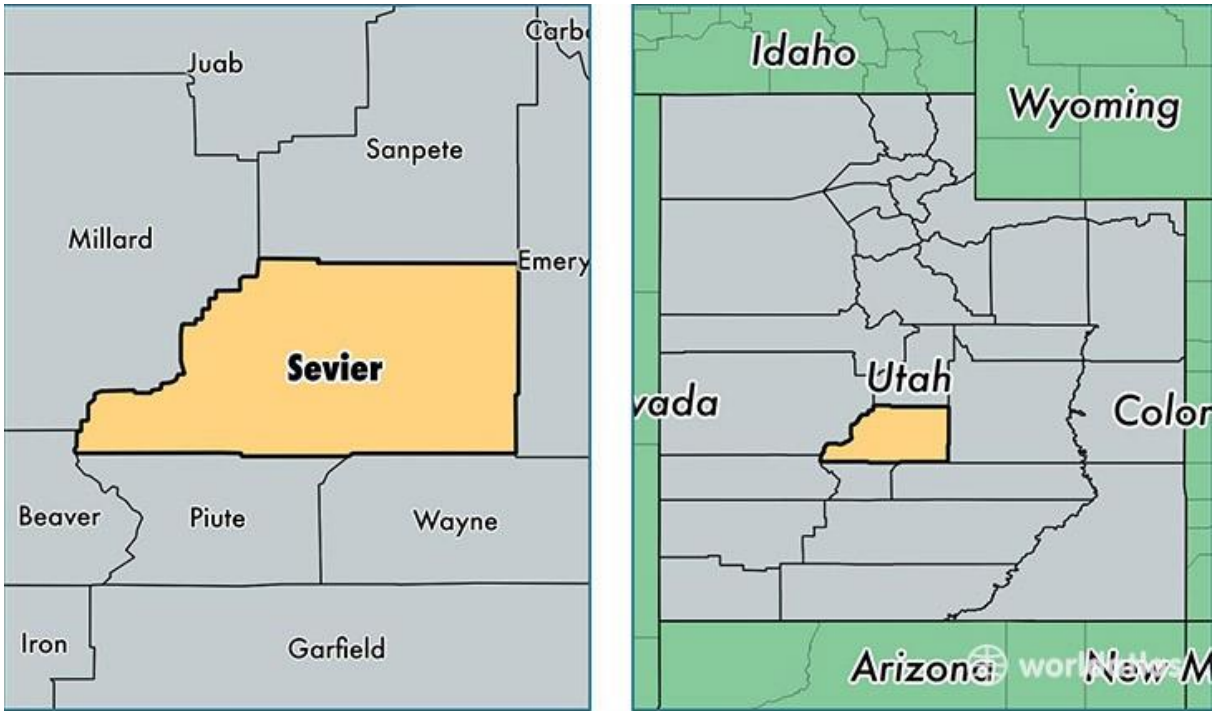

Figure 1

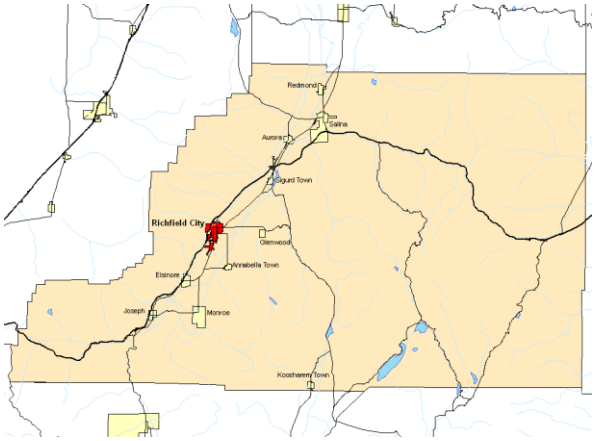

Figure 2

Figure 2. Geographic boundaries of Sevier County and location of the surface waters of the state

B. Natural Environments

River and creek floodplains in Sevier County are associated with one major freshwater river systems (Sevier River, and the tributaries that flow into these. Tamarisks, cottonwoods, and willows characterize these floodplains. Mosquito species commonly found in these environments include *Culex tarsalis, Culex Pipiens, Eurethrothorax, Anopheles Freeborn, Anopheles Franciscans* and a number of floodwater species of *Ochlerotatus* genus specifically *Ochlerotatus Dorsalis*. Also, Aedes Vexans are common in the irrigation areas found within the county.

Woodland ponds, pools, and depressions are isolated wetlands occurring throughout the county within pasture areas. Examples of these habitats include ponds, sloughs, and depressions caused by large and small depressions. Many of these sites contain water only during the sparse rain events during the year, and serve as excellent nurseries for most species of mosquitoes found in our region.

Other natural environments include springs, seeps, tree holes, tree cavities, burrows made by various species of wildlife. However, these as a whole are generally not a pressing concern to our mosquito program, although tree holes play a major role in the biology of *Ochlerotatus varipalpus* and *Orthopodomya signifera. Ochlerotatus varipalpus* could potentially be a vector of the dog heartworm but cases have never been reported in our area.

C. Man-made Environments

Shallow, roadside ditches and canals are frequently suggested as sources of mosquito problems. Such sites often remain dry throughout much of the year because of temperature, but in some suburbs, runoffs from flooded fields can keep them wet for a good part of the year and become very attractive sites for mosquito females to lay their eggs.

Trenches and ruts from the heavy equipment used in construction sites can generate many new mosquito development sites. These newly established “lows” can hold water for prolonged periods of time, and are productive as larval mosquito sites until they are developed or regenerated.

Livestock pastures can pose a serious problem to mosquito abatement agencies, as the livestock not only provide a reliable blood meal for female mosquitoes, but form numerous larval habitats from their hoof prints. The presence of watering troughs on the sites also adds to the problem.

Storm drains and catch basins, although in very low numbers in Sevier County, can provide a nice environment for *Culex Pipiens*, a known vector of WNV in Utah (but never tested positive so far in Sevier County).

Containers come in all sorts of shapes and sizes. These may be represented by something

as small as a bottle top to something as large as a discarded or unkempt boat. Many items in people's backyards could be potential development sites for mosquitoes (toys, bird baths, old tires, etc.).
Other man-made sites include borrow pits, agricultural fields, retention and detention ponds. Fields flooded on purpose by farmers to water their crops are also a major issue for the mosquito abatement program.

D. Pest Problem Description

The county is known to contain 13 species of mosquitoes, although the Sevier Mosquito Abatement & Control actively surveys and conducts control efforts primarily on 8 species (listed below). Two of those species (*Culex Tarsais* and *Culex Erythrothorax*) are known to be carriers of the West Nile virus (WNV) in Sevier County while another *Culex* species (*Culex Pipiens*) have been tested positive for WNV in the north of the Utah but not yet confirmed positive in the South central part of the state. Other mosquito species (primarily in the *Ochlerotatus* genus) found in the county may cause nuisance problems when populations build up after farmers flood their fields or river flooding events. The most common species are:

Aedes Vexans (Meigen, 1830) *Ae. Vexans* is one of the most widespread pest mosquitoes in the world and is widely distributed throughout South-Central Utah where cycles have been observed to follow the irrigation patterns of the farming in the area. Collection of adults decrease during harvest times, which happen 3-4 times a year, in South-Central Utah. There is also a decrease during mid-summer when water pools evaporate too quickly for larval development. Alfalfa and corn are the most likely farm crop to support *Aedes Vexan and Ochlerotatus Dorsalis* larvae. Females prefer the blood of mammals for protein meals. *ae. Vexans* has been implicated as a secondary vector of eastern equine encephalitis and dog heartworm. It has also been tested in laboratories to be suitable to carry West Nile Virus (WNV).

Anopheles Franciscans (McCracken, 1904)

In Southern Utah it is found widely distributed with the largest numbers being collected along the Sevier River drainages in areas along the Sevier River with thick willow patches, tamarisks, and cattails. *An. Franciscans* is rarely found entering dwellings. *An. Franciscans* will primarily use mammals as hosts but will bite birds and reptiles. They prefer swamps and marshy areas with suitable vegetation and algae in the water for larvae to development around. *An. Franciscans* is not currently considered to be an important vector species of malaria in the west, but may have been a factor in outbreaks of malaria in the early settlements of South-Central Utah.

Anopheles Freeborn (Aitkin, 1939)

It is the most common Anopheles species in Utah and is widely distributed throughout the state. In South-Central Utah its largest numbers have been collected along the Sevier

River drainages. Fewer numbers are collected in areas of higher elevation. Females are most active at dusk and, contrary to *An. Franciscans*, will readily enter houses in search of hosts. *Aedes freeborni* almost exclusively uses mammals as hosts. It prefers small mammals like rabbits as hosts over large domestic animals and humans. *A freeborni* is currently considered to be the most important vector species of malaria in the west. This species has also been found to carry the Western Equine Encephalitis (WEE) and St. Louis Encephalitis (SLE) viruses.

Culex Erythrothorax (Dyer, 1907)

In South-Central Utah, *Cx. Erythrothorax* has been found developing in deeper water of ponds and lake margins with heavy vegetation like tules, cattails, willows, and grasses. Large populations have been identified in swampy areas in Glenwood and multiple locations along the Sevier River, and in the Richfield area. This species does not migrate far (generally less than 1 mile) from its larval habitat. *Cx. Erythrothorax* will overwinter as larva and then emerge in late spring. *Cx. Erythrothorax* are the last *Culex* species to be collected for the year. Multiple pools of *Cx. Erythrothorax* have not tested positive for WNV in South Central Utah. These pools are usually from locations with *Culex Tarsalis* that are also positive.

Culex Pipiens (Linnaeus, 1758)
Cx Pipiens are found widely distributed throughout the world and are usually considered the most common pest mosquito in urban and suburban settings. *Cx pipiens* are referred to as the "Northern House Mosquito" because it is rarely found below 39 degrees latitude (although found in), and is more suited for cooler weather conditions. They are regularly found entering homes. Adults are generally active only during the warmer months and prefer to bite birds over mammals. These species can be considered "bridge" vectors, because they maintain the viruses within bird populations and then transmit viruses between birds and mammals. The *Culex Pipien* is a vector, or carrier, of St. Louis Encephalitis (SLE), West Nile Virus (WNV), Western Equine Encephalitis (WEE), Heartworm in dogs, and bird Malaria.

Culex Tarsalis (Coquillett, 1895)
Cx. Tarsalis is widely distributed throughout Southern Utah and in Sevier County. The largest numbers are collected along marshy areas around the Sevier River corridor, and especially in Salina and Redmound. Types of habitat vary immensely from pasture and other flood irrigated crops to wetlands. This species of mosquito is probably the most prominent vector of arboviruses in North America. *Cx. Tarsalis* is the most important transmitter of viruses in Southern Utah. In this area, *Cx. Tarsalis* have been determined to carry Western Equine Encephalitis (WEE), St. Louis Encephalitis (SLE), and West Nile Virus (WNV). In early spring, infected mosquitoes are found, probably as infected overwintering females.

Culiseta Inornata (Williston, 1893)
Cu. Inornata have been found in small numbers in almost all collection locations within South Central Utah. They are more common in marshy areas surrounded with taller

vegetation near farms with cattle or horses. They are active flyers and can disperse 5-10 miles from their emergence site. *Cu. Inornata* mostly feeds on large mammals, with no preference between horses or cattle. Females will sometimes bite humans but are not considered to be a major pest. Extensive testing has not revealed any pools of *Cu. inornata* infected with diseases in South Central Utah

Ochlerotatus Nigromaculis (Ludlow, 1907)
In South Central Utah, Oc. *Nigromaculis* have been collected in large numbers in areas associated with agricultural crops like alfalfa and feed corn, mostly in the Central Valley fields area. *Oc. Nigromaculis* competes directly with *Ae. Vexans* for habitat space. Residential areas surrounding these fields are inundated with aggressive females usually shortly after rainstorms and heavy flooding of fields. *Oc. Nigromaculis* are rarely found in other areas of South-central Utah even though it is a strong flyer (females are capable of flights up to 20 miles when seeking a blood meal). This species are not known to be a natural carrier of disease. Pasture mosquitoes are considered pests and can interfere with agricultural operations as well as the use of recreational areas.

E. Action Threshhold

Action threshold to better guide the Sevier County Mosquito Abatement & Control treatments for adult mosquitoes, thresholds were established according to different criteria. Those criteria have been established based on the fact that in Sevier County, the Mosquito Abatement was created to treat either for nuisance and/or for public health protection (potential transmission of diseases by mosquitoes). Those thresholds are:
> 10 mosquitoes that are vectors of West Nile virus, i.e. *CulexTtarsalis, Culex Pipien, and Culex Erythrothorax* from any trap site in the county.

> 10 nuisance mosquitoes, i.e. *Aedes Vexans, Ochlerotatus Nigromaculis, Ochlerotatus Dorsalis, Anopheles Franciscanus,* or *Anopheles Freeborni* from any trap site in the county.

Often, complaint calls come from residents within the county. Traps are generally used to support claims from residence or surveillance from a county mosquito abatement employee can make a visual inspection to support such claim.

a. If this is a zone where a threshold is already reached (nuisance or vectors), spraying is already scheduled and performed for that zone.
b. If this is a zone where a threshold has not been reached, a CO2 trap is set up to assess the problem. If needed (see thresholds), spraying will be performed.

Field supervisors may report a larvicide failure at a breeding site located near populated areas, which may result in a treatment.

Based on a service request, limited area treatments may be conducted prior to special events or community functions/family functions, areas in which large groups of people

gather for an outdoor activity.

The following thresholds were established to trigger larviciding missions within our service area. Treatments of larval mosquito habitat may be conducted in areas that are found to contain an average of at least 1 larva per dip (using a standard 12 oz. dipper). Actual treatments will be based on local demographics, mosquito species present, and other historic and current conditions.

A limited number of known, historic breeding sites may be treated after a major rain or flooding event if there is insufficient time to inspect and treat all larval sites within the area.

Control of mosquitoes at the larval stage is the major part of mosquito control. Trained technicians survey potential larval habitats and use larvicides when larvae are found. Larvicides are pesticides that are added to the water in order to kill the mosquito larvae before they emerge as adults. Many of the products are applied by hand, with a power backpack, and/or seed spreader. This is done on foot, from all terrain vehicles (ATV's), or from trucks. Some of the pesticides used for larviciding, both in granular and liquid formulations, would include: Chemicals (nerve toxins), bacterial products, surface agents and growth regulators.

F. Adulticiding.

Adult mosquito control is used to rapidly knock down biting adult mosquitoes. This can become necessary when larval control measures are insufficient or not feasible.

Adulticiding is used when there is a **large possibility of disease transmission in an area** such as the West Nile Virus (WNV) and **where adult mosquitoes are considered a nuisance for the public.**

The most common method of adult mosquito control is ultra-low volume (ULV) spraying. ULV spraying is the process of putting very small amounts of liquid into the air as a fine mist of droplets. These droplets float on the air currents and quickly kill mosquitoes that come into contact with them. ULV adulticides are applied in the evening, the night or pre-dawn hours when mosquitoes are most active (different peaks of activity depending on the species). ULV applications are only done during environmental conditions that ensure desirable product movement and that strictly follow the label avoiding/minimizing mortality among non-target species.

Labels and Material Safety Data Sheets (MSDS) of all larvicides and adulticides used in our operation are available for the public and can be viewed from our website.

The United States Environmental Protection Agency (USEPA) approves the use of pesticides nationally. Before pesticides are registered by USEPA, they must undergo laboratory testing for acute and chronic health effects. In these tests, laboratory animal are purposely fed a pesticide at high doses for an extended period of time especially to

see if toxins effects occur.

These tests help scientists judge how these chemicals might affect humans, domestic animals, and wildlife in the case of exposure. We will never exceed the allowable amount of chemical listed on the label.

G. Water Quality Standards

SCMA follows the strict guidelines of the UPDES permit.

Control Measure Description.
A brief explanation of the control measures to demonstrate how to meet the applicable technology-based or water quality-based effluent limitations. These control measures used at the site to reduce pesticide discharge include evaluation and implementation of management tools:

No action or at least delayed action may be taken by the Sevier County Mosquito Abatement & Control at times when a major portion of the county has been inundated with water. When a county wide flooding event takes place it is generally more economical and environmental friendly to allow mosquito larvae to emerge and treat for adults at a later time if necessary. This is because not all larval habitats can be treated in a timely manner to prevent adult emergence, and adult mosquitoes will migrate into our service area from the surrounding regions that have no or reduced mosquito control resources. Conversely, no action may also be taken when sites containing larvae are shallow, and extended weather forecasts indicate dry conditions. Such situations allow larval habitat to dry before mosquitoes can complete their aquatic life stages, and no adults result.

Prevention, mechanical/physical methods and cultural methods are by definition very similar in nature and share many characteristics. These methods can be as basic as simply emptying water from containers or as complex as repairing broken water lines which often require the involvement of other county departments. Mechanical/physical and cultural methods manipulate larval habitat to prevent favorable conditions for mosquitoes to complete their aquatic development. Physical manipulation of environments such as removing blockages in ditches that serve as barriers to natural predators of mosquitoes are sometimes quick and effective means to resolve problems on a localized level.

Educational program and area events allow the opportunity to suggest ways that residents can assist in the prevention of mosquito problems by removing containers and articles from their yards that provide larval habitat, and to be mindful that birdbaths and pet water bowls could serve as mosquito sanctuaries when not properly maintained.

Biological control products* can be used for the control of larval stages of mosquitoes. Formulations containing *Bacillus sphaericus* and/or *Bacillus thuringiensis israelensis* are used to treat flood water and other larval sites.

Chemical pesticides* often are any abatement agency's last choice of control measures. These products are applied as directed by their respective label, and all equipment used in this process is closely monitored and calibrated by staff.

** A list of all insecticides (labels and MSDS) used in the past or still in use is provided on the SCMA website (www.sevierutah.net). You can also find on the website the mode of action of the different families of products (organophosphates, growth regulators, etc.). Both documents are also posted at the end of this document.*

Operators must consider impact to non-target organisms, impact to water quality, pest resistance, feasibility, and cost effectiveness when evaluating and selecting the most efficient and effective means of pest management to minimize pesticide discharge to waters of the U.S. Control measures are evaluated separately on the basis of mosquito life stage as follows:

Adult Control efficacy is determined from pre and post treatment trap counts when a trap site is located within the spray block. In addition, landing rates taken by staff are used to supplement this data when trap sites are not located near a treatment area.

Larval control efficacy is more difficult to access, as our primary larvicide product is a growth hormone that does not cause mortality until the later stages of the larvae's development. Often, in this case, a failure is not realized until "healthy" adults are found emerging after their pupal stage. However, post-treatment surveys do verify successful treatments when using larvicide oils and films, or biological control products, such as *B.sphaericus* or *Bti* products.

4. Schedules and Procedures Pertaining to Control Measures Used to Comply with the Effluent Limitations.

A. Pertaining to control measures used to comply with the effluent limitations Application Rate and Frequency Procedures.

1. Application Rate Determination
    a. Determine species and age of target mosquito(es)
    b. Evaluate environmental conditions
    c. Consider target area flora and fauna
    d. Determine appropriate application rate based on product label recommendations, previous experience and efficacy tests
2. Frequency Determination
    a. Determine target site treatment history with selected pesticide
    b. Evaluate effect of selected pesticide use on frequency and quantity thresholds for active ingredient
    c. Consider alternate treatment options & compare costs.
3. Resistance Considerations
    a. Consider documented resistance of target species to selected pesticide and/or any other compounds that are in the same class or exhibit similar
    b. Consider the use of alternate control options and compare costs.
4. Spill Prevention Procedures.
    a. Perform monthly inspections of chemical storage rooms and the warehouse (Garage) areas. Maintain buildings to full function ability.
    b. Keep OSHA requirements log (spill response supplies, PPE Locations, chemical list) up to date.
5. Pesticide Application Equipment Procedures.
    a. Ground Adulticiding

i. Operations: Application equipment must be calibrated annually to confirm the Volume Median Diameter is according to the label of the pesticide being used.
ii. A visual inspection of spray equipment for leaks or wear in the lines, tanks and nozzle is done prior to the start up of spray equipment.
iii. Routine cleaning and maintenance of the spray system must be performed to ensure system is operating properly.

6. Maintenance
    a. Weekly Checks - Visually check the fog generator each week before use and make any necessary adjustments and /or repairs. Before making any repairs, it is required that PPE is worn.
    b. Check all gasoline hoses, insecticide lines and fittings for cracks, leaks or wear. Replace if needed.
    c. Check all bolts and fasteners and tighten as necessary.
    d. Ensure that pesticide tanks have sufficient chemicals for assigned spray route.
    e. Check all nozzle parts for wear or physical damage. Replace damaged parts.
    f. Inspect blower air filter for cleanliness and serviceability.
    g. Check engine oil. Add oil as needed.
    h. Check fuel level.
    i. Start engine, listen for any unusual noises and watch for excessive smoke or any engine oil leaks.
7. Ground Larviciding
    a. Ground larviciding is conducted by the Sevier County Mosquito Abatement and control staff in a number of situations using various products throughout the season.
    b. Hand treatments are conducted within Sevier County by licensed personnel using their best professional judgment. These treatments generally take place on a daily basis. Listed sites are visited monthly and surveyed for the presence of larvae. Some sites may be pretreated where historic data justifies such actions.
8. Pest Surveillance Procedures
    a. Adult Surveillance
        i. Service request inspections are taken from telephone and from telephone messages and emails (on our website). Many of these are simple requests for treatments, although occasionally such calls lead to finding problems needing attention. Technicians generally will check for mosquito larvae and determined if adult populations warrant treatment during these inspections from observed densities.
        ii. CO2 trap collections are paramount to our WNV surveillance. This trap type is particularly effective in catching *Culex pipiens and Culex Tarsalis,* the latest is our primary WNV vector. 20-30 CO2

traps are deployed throughout the county each week during the mosquito season.

iii. CO2 trap collections are used for both nuisance mosquito surveillance and WNV surveillance.

9. Larval Surveillance
    a. Service request inspections preformed by our Field Supervisors will check for mosquito larvae and determine if adult populations warrant treatment during these inspections.
    b. Breeding site inspections are conducted by our Field Supervisors following flooding events caused by rains, snow melts, or farmers. Larval surveillance entails locating the larval source (if not already known), sampling for larvae and estimating larval density, determining larval developmental stage(s) and collecting larvae for identification purposes. Other factors considered during inspections include the type of environment (pond, ditch, etc.), presence of aquatic vegetation, and if any natural predators (like fish) are present.
10. Disease Surveillance
    a. Mosquito pool analysis is the most useful indicator of the presence of WNV in our service area. Up to 50 adult mosquitoes (RAMP technology) or 100 adult mosquitoes (RT-PCR technology) are grouped to form a single sample for WNV virus analysis.
11. Assessing Environmental Conditions Procedures.
    a. General Considerations.
        i. Climatic conditions are always checked prior to any ground applications. Wind speed, wind direction, and the possibility of impending rain must be taken into consideration when applying liquid or solid products because of drift, dilution, or chemical breakdown depending on the product being used. Temperature also plays a role in our methods, especially the timing of application and the choice of products used.
    b. Adult Mosquito Treatments
        i. Treatments for adult mosquitoes occur in both urban and rural areas of the county. Applicators are always aware of nearby crops, blooming crops, and beehive locations that have identifiable Utah Department of Agriculture registration numbers located on the box(s) and turn spray equipment off when necessary to avoid drift into such areas where bees are active at the time of application. Similarly, equipment is also turned off when approaching large bodies of water, such as lakes and ponds to avoid any adverse reactions to non-target organisms in these environments.
    c. Ground Adulticiding Procedures
        i. Apply when insects are most active and meteorological conditions are conducive to keeping the spray cloud in the air column close to the ground.

ii. Apply during the cooler hours of the night or early morning when thermal activity is low. Do not apply when ambient temperature is less than 50 F.
iii. Apply when ground wind speeds are equal to or greater than 1 mph but less than 9 mph.
iv. Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present. SCMA will attempt to use weather conditions will help facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body.
v. Pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply product or allow drift during the specific times during daylight hours when bees are actively visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes, or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.
vi. To minimize hazard to bees, it is recommended that the product is not applied more than two hours after sunrise or two hours before sunset, limiting application to times when bees are least active. The label is the law on the product(s) used in mosquito control.
vii. Beekeepers who are actively registered through the Utah Department of Agriculture are required to notify the Mosquito Abatement Department of the locations of their hives and submit a 'No Spray Request.' That request may be denied if the location of the hives conflict with county and/or city ordinances. They may choose other locations that will help in protecting their colonies by working with the Sevier County Mosquito Abatement and by following any existing ordinances that are adopted by Sevier County and/or the municipalities within Sevier County.