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DAIRY REVIEW

Sacramento Valley

August 15, 2005
Vol. XIV, No. 5

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Water Board Requires Dairies To Submit Report

On August 8, the Central Valley Regional Water Quality Control Board sent a letter to owners and operators of Central Valley milk cow dairies requesting them to submit a mandatory Report of Waste Discharge no later than Oct. 17, 2005. The mandatory report includes a fee. Dairies which already have Waste Discharge Requirements issued by the Regional Board will receive the same request, but there is no fee charged.

Back in May of 2003, the Regional Board sent a letter to all dairies about their obligations to comply with California Water Code Section 13260, which requires a Report of Waste Discharge, and compliance with the new federal and state regulations for protecting water quality. In that letter, the Regional Board said dairy farmers were not to submit any information to the Regional Board until requested to do so.

The August 8 letter is the request to proceed with the submittal of a Report of Waste Discharge.

Dairy producers that have not received a letter from the Regional Board or who have questions about the Regional Board's dairy regulatory program are urged to contact one of the following staff:

- Charlene Herbst (Rancho Cordova) (916) 464-4724 cherbst@waterboards.ca.gov
- Mary Randall (Redding) (530) 224-4860 mrandall@waterboards.ca.gov

The California Dairy Quality Assurance Program will be holding meetings to provide assistance in completing the Report of Waste Discharge. Meeting dates and locations are being scheduled and you are urged to contact the California Dairy Quality Assurance Program (see website: <http://www.cdqa.org/contacts/>) or your dairy association representative for more information. As soon as we have dates, we will send out information from the Cooperative Extension Office.

The Report of Waste Discharge is the first step that dairy farmers need to go through to assess their waste handling and land application practices to be sure that they are protecting surface water and groundwater quality.

The Regional Board staff believes that changes and improvements are likely to be needed on most dairies. They are urging all dairy farmers to work closely with the California Dairy Quality Assurance Program, UC Cooperative Extension, dairy industry groups, and private consultants to be sure dairy operations are consistent



with state regulatory requirements.

Regional Board staff is preparing Waste Discharge Requirements that will apply to existing Central Valley dairies. The Waste Discharge Requirements will address management of manure and wash water and will specify the minimum requirements that must be met to protect the quality of surface water and groundwater.

Regional Board adoption of the Waste Discharge Requirements is scheduled for the fall and all interested parties will have an opportunity to review and comment on the proposed action.

For the latest information, see the Regional Board web site at <http://www.swrcb.ca.gov/rwqcb5/>.

West Nile Virus - How Dairies Can Help "Fight the Bite"

West Nile Virus is here in a big way! The South Valley leads the state in the number of human cases of WNV. As of July 29th, 56 cases of human WNV infections had been identified in California. Nearly half of those human cases were in Kings, Tulare and Kern counties. The first death in California related to West Nile this year occurred in Kings County on July 21st.

WNV is transmitted by mosquitoes. Mosquitoes acquire the virus when they feed on infected birds, which are the natural host. Although most birds infected with WNV do not suffer any illness, some get sick and die. An increase in the number of dead birds can be an indication that WNV is present. Local, state and federal agencies have been sampling dead birds for the presence of WNV since it first arrived in California in 2003. During the last two weeks of July 2005, half of the 731 dead birds collected statewide tested positive for WNV. Many of those were from the South Valley.

Infected mosquitoes can spread the virus to people or animals. Most people who are bitten by an infected mosquito will not become sick and those that do usually only develop flu-like symptoms. In some cases, a more serious neurological condition in humans leading to disability or even death can develop. Animals can also acquire WNV from infected mosquitoes, but few develop disease. Horses are the exception. Last year 540 WNV cases were reported in horses. Nearly half of those died or had to be euthanized.

Dairies can do their part to help curb the spread of WNV by eliminating mosquito breeding sites. Mosquitoes need quiet, standing water to successfully reproduce (see life cycle that follows). Manure storage ponds on dairies can become a significant source of mosquitoes. The good news is that ponds can be managed to prevent mosquito breeding. For many years, local mosquito abatement districts have sprayed dairy ponds for mosquito control. Unfortunately, storage ponds choked with weeds and manure solids are difficult or even impossible to spray.

Weeds provide sheltered water for mosquitoes and they also prevent larvacide sprays from reaching the surface of the water. Floating solids can support growth of weeds and also restrict wind action on the pond surface. Weeds are the easiest to deal with. The best course of action is to control weeds on pond walls with herbicides or soil sterilants early in the spring. If that fails (or more likely never gets done), vegetative growth must be sprayed with herbicides. Any weeds, dead or alive, that are at or near the water's edge must be removed.



Floating solids and sandbars are more problematic. Most dairies constantly struggle to keep solids from entering ponds by various means not so much for mosquito control, but because solids reduce storage volume. Solid separation systems aren't perfect and eventually all dairies deal with manure solids in the pond. The summer irrigation season is a good time to circulate fresh ditch or well water through the storage pond to stir up and flush out as much of the accumulated solids as possible. Tractor mounted PTO driven choppers or floating agitator pumps can help disburse fibrous islands of solids. Professional excavating or dredging services may be necessary in ponds heavily loaded with solids.

If your ponds have weeds that need to be removed and you can't get it done, hire someone. Mosquito abatement districts have the authority to issue substantial fines. Fines have not been issued to dairies in the past, but public health concerns about WNV make it a very real possibility. Please, no more front-page dairy headlines! Do your part to help "fight the bite" and reduce the risk from WNV.

Life Cycle of the House Mosquito

There are many species of mosquitoes in California, and all pass through four stages to their life cycle- the egg, larva, pupa and winged adult. Because water is essential for egg laying and hatching, and for development of larvae and pupae, the first three stages are spent in standing water. In about a week, the adult (male and female) mosquito emerges from the pupae and leaves the breeding place to mate and feed, and in the case of the female, to return to the breeding place to lay eggs. Before egg laying, she normally takes a blood meal from any available warm-blooded animal - birds, cattle, horses or people.

In manure storage ponds, only one mosquito species is normally found. It's scientific name is *Culex quinquefasciatus*; commonly called the "house mosquito". Another common name is "foul water mosquito" because of it's preference for unclean water as a breeding place.

Normally, eggs are laid in manure storage ponds in selected sites overgrown with weeds or in areas matted with floating material. The female may live 2 to 3 weeks and can lay as many as 40 to 100 eggs in a single batch every 3 to 4 days. The life cycle from egg to adult can be completed in 5 to 7 days. With such a rapid reproduction rate, adult mosquito populations can build up quickly to enormous numbers. The female mosquito can fly long distances from the breeding place in search of a blood meal and may cause a severe nuisance as well as a public health concern to communities four or five miles away from heavy mosquito producing manure storage ponds.

Reference: Planning Dairy Wastewater Systems for Mosquito Control, 1984. UC Division of Ag & Natural Resources Leaflet 21398.

Resources

Local mosquito abatement : Call the number for more information and to see if your area has service.

Butte County Mosquito Abatement: 530-533-6038

Tehama County Mosquito Abatement: 530-527-1676 (Not all areas have service)

Glenn County Mosquito Abatement: 530-533-6038 (Service only to Hamilton City and Willows)

Shasta County Mosquito Abatement: 530-365-3768

Colusa County Mosquito Abatement: 530-458-4966

California Dept. of Health Services:

(continued)

For more information on West Nile Virus call the WNV Hotline at 800-975-4448 or visit the web site <http://www.westnile.ca.gov/>

You can also report dead birds at this site, or you can report dead birds on the California Dead Bird Hotline at 877-WNV-BIRD (877-968-2473).

California Dept. of Food & Agriculture:

For more information on West Nile Virus in horses, call the Equine West Nile information line 1-800-268-7378 or email WNVirus@cdfa.ca.gov or visit http://www.cdfa.ca.gov/ahfss/ah/wnv_info.htm.

Grazing Discussion Group To Meet This Fall

I had hoped to organize an informal grazing management discussion day with interested grass-based dairy owners before I left, but between my schedule and the weather, I have decided to postpone it until September when the weather is cooler. If you are using irrigated pastures in your dairy operation and are interested in seeing what other dairy producers are doing that are also grass-based, please call our office to have your name put on the discussion group list. I will call everyone when I get back and organize a date in the last week of September or the first week of October.

I would like the to group to be able to visit 3 to 4 farms on the discussion day (including your farm), share management practices and talk about successes and problems. If the meeting goes longer than 1/2 a day, we can pick a nearby restaurant for a no-host lunch and then keep going.

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