

From: [Adrienne Ellsaesser \[EH\]](mailto:Adrienne.Ellsaesser@eh.sjca.gov)
To: [Jimmerson, Chris@Waterboards](mailto:Jimmerson.Chris@Waterboards)
Cc: Norman.Fujimoto@sbcphd.org; Ray.Ruminski@lakecountyca.gov
Subject: August 2013 Draft WDRs and MRP for Discharges from Irrigated Lands San Joaquin County and Delta Area.
Date: Friday, September 13, 2013 4:39:23 PM
Attachments: [Backflow Devices on Agricultural Wells WWTAC position paper7_25 \(4\).doc](#)

Dear Mr. Chris Jimmerson,

We, the Water Well Technical Advisory Committee, are submitting the attached position paper to comment on the Draft WDRs Draft WDRs and MRP for Discharges from Irrigated Lands for San Joaquin County and Delta Areas. This document has CCDEH Land Use Policy Committee Approval. Due to the short time frame we do not have the position paper on CCDEH letterhead or their signature. Until we do please accept the attached email below showing their support and forth coming signature.

Regards,
Adrienne

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From: Porter, Corwin [<mailto:Corwin.Porter@dph.sbcounty.gov>]
Sent: Friday, September 13, 2013 8:00 AM
To: 'Sipe, Jerry'; Ray Ruminski; svanstoc@rivcocha.org; Justin Malan (justin@ccdeh.com); Schmidtbauer, Terry (TSchmidtbauer@solanocounty.com); Cbatson (E-mail) (cbatson@co.slo.ca.us); Banner, Brad (bbanner@buttecounty.net); Leslie Lindbo ; Levi, Ariu, Env. Health (ariu.levi@acgov.org); Taber, Jeff (Jeff.Taber@co.kings.ca.us); Angelo Bellomo (abellomo@ph.lacounty.gov); Robert Kostlivy (RKostlivy@co.tuolumne.ca.us); emorgan@sierracounty.ws; Ng, Rebecca (RN@co.marin.ca.us); Sanchez, Richard (Richard.Sanchez@ochca.com)
Cc: Sheryl Baldwin (sheryl@ccdeh.com); Fujimoto, Norman
Subject: RE: CCDEH Executive Committee Agenda August 14 2013

Did we get a second on this? If not, I will second. Thank you.

Corwin Porter, MPH, REHS
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From: Sipe, Jerry [<mailto:JerrySipe@countyofplumas.com>]

Sent: Thursday, September 12, 2013 5:37 PM

To: Ray Ruminski; svanstoc@rivcocha.org; Justin Malan (justin@ccdeh.com); Schmidtbauer, Terry (TSchmidtbauer@solanocounty.com); Cbatson (E-mail) (cbatson@co.slo.ca.us); Banner, Brad (bbanner@buttecounty.net); Leslie Lindbo ; Levi, Ariu, Env. Health (ariu.levi@acgov.org); Taber, Jeff (Jeff.Taber@co.kings.ca.us); Angelo Bellomo (abellomo@ph.lacounty.gov); Robert Kostlivy (RKostlivy@co.tuolumne.ca.us); Porter, Corwin; Porter, Corwin; emorgan@sierracounty.ws; Ng, Rebecca (RNg@co.marin.ca.us); Sanchez, Richard (Richard.Sanchez@ochca.com)

Cc: Sheryl Baldwin (sheryl@ccdeh.com); Fujimoto, Norman (Norman.Fujimoto@sbcphd.org)

Subject: RE: CCDEH Executive Committee Agenda August 14 2013

Thanks to the WWTAC for their work on this. I'll make a motion we send the position paper to each Regional Board under CCDEH letterhead and Land Use Policy Committee Chair signature.

Jerry Sipe

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DRAFT

July 29, 2013

From: Water Well Technical Advisory Committee (WWTAC)
To: Regional Water Quality Control Boards
Reason: Backflow Devices on Agricultural Wells

Background:

Two recent Regional Board Agricultural Orders (see below) mandate the installation, maintenance and testing of backflow prevention devices (BFDs) on all agricultural well systems that inject either chemicals or fertilizers into the water produced by these well systems. Jurisdiction for the installation, operation and maintenance of agricultural BFDs is the local Agricultural Commissioner (AC). Their authority on cross connection and BFDs is delegated by the State Department of Pesticide Regulation (DPR) and the California Code of Regulations (CCR). Title 3, Sections 6609 & 6610 state that the AC enforces and requires installation of functional BFDs to those who apply a pesticide intended for application through an irrigation system (aka chemigation). These regulations do **not** require BFDs when a fertilizer is being applied through an irrigation system.

Growers that apply pesticides which have a *restricted-use* status through an irrigation system must first file a Notice of Intent for use with the AC. This notice gives the AC staff time to determine if a BFD is required and to notify the grower of their determination. In many instances of chemigation, pesticides that are **not** *restricted-use* chemicals are being used and in these cases, the AC is not made aware that chemigation is taking place so they do not have an opportunity to evaluate whether to require the installation of BFDs.

Only local, regional, or state government agencies that are authorized as an *Enforcement Agency* may enforce the California Well Standards Bulletins 74-81 and 74-90 (Bulletins). These standards pertain to the construction, alteration, maintenance, and destruction of a water wells. Typically, it is the local Public or Environmental Health agencies that are the *Enforcement Agency* and have jurisdiction over the actual construction of the water wells per the Bulletins and any Local Ordinances. At the time the wells are constructed, the Enforcement Agency is able to require a single check valve or air gap on the discharge line of the well, as required of Section 10, F, of the Bulletins. This section states "*All pump discharge pipes not discharging or open to atmosphere shall be equipped with an automatic device to prevent backflow and/or back siphonage into the well and irrigation well systems, including those used for landscaping irrigation and other well systems that employ, or which have been modified to employ, chemical feeders or injectors shall be equipped with a backflow prevention device(s) approved by the enforcing agency*".

At the time the well construction is finalized the by *Enforcement Agency*, frequently the Agency is unable to observe equipment indicating a chemical feed system will be connected to the well's water system. Once the agricultural well is constructed and finalized, the jurisdiction for BFDs is passed to the local AC, as the *Enforcement Agency* does not have the legal authority to return the property to ensure proper installation of a BFD.

Backflow prevention devices used for residential connections are regulated under Title 17 of Health and Safety Code and Chapter 6 of the California Plumbing Code. Local Public and Environmental Health agencies use these regulations to insure that such devices are appropriate for the situation and installed as required by regulation at Small Public Water Systems, sewage treatment plants, recreational pools, retail food and housing facilities that they regulate.

DPR and ACs are not authorized to enforce Health and Safety Code statutes or Title 17 regulations pertaining to the protection of drinking water. Title 3 of the CCR, Section 6610 does not obligate ACs to enforce regulatory requirements that are beyond the scope of their current authority to require BFD when pesticides are injected into an irrigation system. The AC does not have the authority to require BFDs when fertilizers are injected through an irrigation system (aka fertigation).

Agricultural Orders:

1. Agricultural Order R3-2012-001
www.waterboards.ca.gov/rwqcb3/.../final_agorder_atta_032612.pdf states “**By October 1, 2012**, Dischargers that apply fertilizers, pesticides, fumigants or other chemicals through an irrigation system must have functional and properly maintained back flow prevention devices installed at the well or pump to prevent pollution of groundwater or surface water, consistent with any applicable DPR requirements or local ordinances. Back flow prevention devices used to protect water quality must be those approved by USEPA, DPR, California Department of Public Health (CDPH), or the local public health or water agency.”
2. [General Order for the Eastern San Joaquin River Watershed Attachment E](#): “Back flow prevention devices – Back flow prevention devices are installed at the well or pump to prevent contamination of groundwater or surface water when fertilizers, pesticides, fumigants, or other chemicals are applied through an irrigation system. Back flow prevention devices used to comply with this Order must be those approved by USEPA, DPR, CDPH, or the local public health or water agency.”

Issues:

1. Local Public and Environmental health agencies have no jurisdiction to make any requirements on operation and maintenance of agricultural water wells and the installation of backflow prevention devices, after the well construction inspection has been finalized. With the increased detections of pollutants in groundwater further supports the installation, maintenance and testing of the proper devices to prevent the entry of pollutants into the groundwater.
2. Local health agencies have been informed of conditions where the installed devices have not been regularly maintained and some backflow systems modified so that cross connection conditions exist.
3. Agricultural wells have been associated with groundwater contamination due to improper backflow prevention device; no device installed; improper installation; failure of the device due to lack of maintenance and testing.

4. Except through Water Boards Orders, there are no regulations or regulating agency that requires the installation of a BFD to protect the well and ground water, when fertilizers are applied through an irrigation system.

Examples:

- A. "Our Environmental Health Department received a complaint from a well driller of well water injected with fertilizer at a nursery facility was running backwards down the well at 10 gpm, as the single check valve had failed."
- B. "A Non-Transient Non-Community water system that serves a public school that we regulate has a well that is constructed with a 250' annular cement seal. The well tests with nitrates at 10 ppm for 3 quarters of the year, but in the first quarter months (January, February, March) the well tests with nitrates at 30 ppm. A nearby irrigation well is the suspected culprit."
- C. "During a routine inspection of a public water system that serves both agriculture and domestic water, it was observed that at several irrigation connections, the backflow devices had been bypassed so that water from the wells were directly feeding the chemical feed system without adequate backflow protection."

Conclusion:

1. Regional Water Quality Control Boards (RWQCB) should work closely with local Environmental and Public Health agencies, AC, DPR, and CDPH staff to ensure that the proper backflow prevention devices are required, installed, maintained and tested, when fertigation and chemigation practices are being utilized at water wells.
2. At this time, no other agency is routinely inspecting wells at irrigation facilities to monitor fertigation and chemigation of non-restrictive use pesticide application activities. RWQCB should develop a plan to include in their inspections of the regulated agricultural facilities, verification that proper BFD or other wellhead protection has been installed when fertigation and/or chemigation activities are employed at their regulated facility. This plan should include verification that testable BFDs have been annually tested and repaired as needed to be functioning properly.
3. RWQCB should work with Environmental and Public Health agencies, AC, DPR, and CDPH staff to develop a plan to incorporate checks into inspections of wells that these agencies regulate so that BFDs are inspected and test reports are submitted in a timely manner.