

## SUMMARY OF DRAFT AG ORDER REQUIREMENTS

<b>NITRATE – GROUNDWATER</b>				
Legal Requirement - Reduce Nutrient Discharges to Groundwater to Meet Groundwater Standards <sup>2</sup>				
<b>Tier 1, Tier 2, and Tier 3 - REQUIREMENTS</b>				
<b>Draft Ag Order Condition</b>	<b>Confirmation of Compliance (monitoring/reporting)</b>	<b>Point of Compliance<sup>1</sup></b>	<b>Milestone(s) to Measure Progress</b>	<b>Time to Compliance</b>
(31) Dischargers must ensure that agricultural discharges percolating into groundwater must be of such quality at the point where they enter the ground to assure the protection of all actual or designated beneficial uses of groundwater, including drinking water.	Farm Plan	Ranch	Farm Plan developed	1.5 Years
	Management practice implementation	Ranch	Farm Plan updated	2.5 Years and every year thereafter
(34) Dischargers who choose to utilize containment structures to achieve treatment or control of the discharge of wastes, must construct and maintain such containment structures to avoid percolation of waste to groundwater that causes or contributes to exceedances of water quality standards, and to avoid surface water overflows that have the potential to impair water quality.	Farm Plan	Ranch	Farm Plan developed	1.5 Years
	Management practice implementation	Ranch	Farm Plan updated	2.5 Years and every year thereafter
(35) Dischargers must implement proper handling, storage, disposal and management of pesticides, fertilizer, and other chemicals to prevent discharge of waste to waters of the State.	Farm Plan	Ranch	Farm Plan developed	1.5 Years
	Management practice implementation	Ranch	Farm Plan updated	2.5 Years and every year thereafter
(36) Dischargers must properly destroy all abandoned groundwater wells, exploration holes or test holes, as defined by DWR, in such a manner that they will not produce	Farm Plan	Ranch	Farm Plan developed	1.5 Years
	Management practice implementation	Ranch	Farm Plan updated	2.5 Years and every year

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water or act as a conduit for mixing or otherwise transfer groundwater or waste constituents between permeable zones or aquifers.				thereafter
(44) Dischargers must sample private domestic and single primary irrigation groundwater wells on their operations	Sample two times in one year  Report sampling results to Water Board	Ranch		1 Year  2 Years
(63) Dischargers must not cause or contribute to exceedances of nutrient and salt water quality standards in waters of the State or the United States. Dischargers may have to implement best management practices, treatment or control measures, or change farming practices to achieve compliance with this Order.	Farm Plan  Management practice implementation	Ranch  Ranch	Farm Plan developed  Farm Plan updated	1.5 Years  2.5 Years and every year thereafter
(64) 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.	Report to Water Board	Ranch		3 Years
(73 - 74) Dischargers must develop and implement a farm water quality management plan (Farm Plan).	Farm Plan  Management practice implementation	Ranch  Ranch	Farm Plan developed  Farm Plan updated	1.5 Years  2.5 Years and every year thereafter
(75 - 77) Dischargers must obtain appropriate farm water quality education and technical assistance to achieve compliance.	Farm Plan	Ranch	Farm Plan developed	1.5 Years

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<b>Tier 2 and Tier 3 - ADDITIONAL REQUIREMENTS</b>				
<b>Draft Ag Order Condition</b>	<b>Confirmation of Compliance (monitoring/reporting)</b>	<b>Point of Compliance<sup>1</sup></b>	<b>Milestone(s) to Measure Progress</b>	<b>Time to Compliance</b>
(79) Tier 2 and Tier 3 Dischargers must submit an Annual Compliance Document.	Compliance Document Reporting	Ranch	Compliance Document submitted	1.5 Years and every year thereafter.
(80 - 83) Tier 2 and Tier 3 Dischargers must calculate the nitrate loading risk factor for each ranch/farm included in their operation.	Compliance Document Reporting	Ranch	Compliance Document submitted	1.5 Years and every year thereafter.
(84 - 85) Tier 2 and Tier 3 Dischargers <i>with High Nitrate Loading Risk</i> must record total nitrogen applied per crop, per acre to each farm/ranch or nitrate loading risk unit	Compliance Document Reporting	Ranch	Compliance Document submitted	3.5 Years and every year thereafter.
<b>Tier 3 - ADDITIONAL REQUIREMENTS</b>				
<b>Draft Ag Order Condition</b>	<b>Confirmation of Compliance (monitoring/reporting)</b>	<b>Point of Compliance<sup>1</sup></b>	<b>Milestone(s) to Measure Progress</b>	<b>Time to Compliance</b>
(86) Tier 3 Dischargers with <i>High Nitrate Loading Risk</i> must determine the typical crop nitrogen uptake for each crop type produced and report the basis for the determination.	Compliance Document Reporting	Ranch	Compliance Document submitted	1 Year
(87 -89) Tier 3 Dischargers <i>with High Nitrate Loading Risk</i> must a) develop and initiate implementation of an Irrigation and Nutrient Management Plan (INMP) certified by a Professional, or as an alternative, b) propose an individual discharge groundwater monitoring and reporting program.	INMP Plan or alternative  Compliance Document Reporting - INMP Plan elements	Ranch  Ranch	INMP Plan developed  Compliance Document submitted	2 Years  3.5 Years and every year thereafter
(90) Tier 3 Dischargers <i>with High Nitrate Loading Risk</i> must meet Nitrogen Balance ratio targets or implement an alternative to demonstrate an equivalent nitrogen load Reduction.	Compliance Document Reporting - INMP Plan elements	Ranch	Targets met  Compliance Document submitted	3 Years  3.5 Years and every year thereafter.

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Nitrogen Balance Targets: Crops in Rotation - 1 Annual Crops – 1.2				
(91) Tier 3 Dischargers <i>with High Nitrate Loading Risk</i> must verify the overall effectiveness of the INMP	INMP Plan	Ranch	INMP Plan developed	2 Years
	Compliance Document Reporting - INMP Plan Effectiveness	Ranch	Compliance Document submitted	5 Years
(101) Tier 3 Dischargers must demonstrate that they are not causing or contributing to exceedances of water quality standards for nitrate and salts in groundwater in waters of the State or of the United States.	Management practice effectiveness reporting	Ranch	Nitrogen Balance Ratio improvement	10 Years
	Nitrogen applied, nitrogen crop uptake and nitrogen balance ratios	Ranch	Measured load reduction	
	Individual Discharge Monitoring	Variable: in discharge or just prior to discharge entering groundwater	Measured concentration reduction in discharge	
	Receiving Water Monitoring	Receiving Water	Measured concentration or load reduction in receiving water	

**Footnote 1**

The Point of Compliance does *not necessarily* refer to a place that water quality standards must be met. The Point of Compliance refers to the place where a specific condition or action required by the Order takes place and where any indicator or parameter is measured or observed as required by the Order or by the Monitoring and Reporting Program, which may or may not be receiving water. Therefore, the Point of Compliance is variable and dependent on which condition or action is under evaluation as an indicator of compliance. For example, when a discharger must implement farm water quality practices and report on the practices in the Farm Plan or Annual Compliance Document, the Point of Compliance is the farm, ranch or location where the practice is employed. If the discharger must monitor their individual discharge, the point of compliance may be any of the following as applicable: at the edge of the farm, at an appropriate point after the discharge passes through a treatment or control structure or system that is located off the farm (e.g., a vegetated buffer or conveyance ditch adjacent to the farm), or at the point just prior to the discharge entering the receiving water body, or in the receiving water.

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### Footnote 2

#### Basin Plan Chapter 2, Sec. II.A.4.a -- Numeric Nitrate and Nitrite Objectives for the protection of MUN in groundwaters

"Groundwaters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Chapter 15, Article 4, Section 64435, Tables 2 and 3." Same as Table 3-2.

The MCL for Nitrate (as NO<sub>3</sub>) is 45 mg/L. The MCL for Nitrate + Nitrite (sum as N) is 10 mg/L. The MCL for nitrite (as N) is 1 mg/L.

#### Basin Plan Chapter 2, Sec. II.A.4.a -- Numeric Nitrate and Nitrite Objectives for the protection of AGR in groundwaters

"Groundwaters shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3. In addition, water used for irrigation and livestock watering shall not exceed the concentrations for those chemicals listed in Table 3-4."

#### Basin Plan Chapter 2, Sec. II.A.5. Numeric Nitrogen Objectives for specific groundwaters

"Certain water quality objectives have been established for selected groundwaters; these objectives are intended to serve as a water quality baseline for evaluating water quality management in the basin. The median values for groundwaters are shown in Table 3-8." Nitrogen (as N) water quality objectives for specific ground waters range from 1 to 8 mg/L.

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