

**Response to Comments**

**On**

**Tentative General Waste Discharge  
Requirements (WDRs)  
and  
General National Pollutant Discharge  
Elimination System (NPDES) Permit**

**For**

**Existing Milk Cow Dairy  
Concentrated Animal Feeding Operations  
Within the Central Valley Region**

Item XX

Central Valley Regional Water Quality Control Board Meeting  
10 December 2010

<b>Commenter</b>	<b>Date Comments Received</b>	<b>Response Located on Pages:</b>
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Commenter A

**Comments by David Albright,  
United States Environmental Protection Agency, Region IX  
Received 5 November 2010**

1. Comment: Remove references allowing a phase-in of the Nutrient Management Plan (NMP) after the Notice of Intent (NOI) is received. The tentative order/draft permit must require the permittee to submit with the NOI an NMP that is developed in accordance with 40 CFR 122.42 (e) and 412.4(c) if applicable and that is fully implemented at the time the facility is covered under the general permit.

**Response: The tentative order has been modified to make it clear that the NMP must be complete when submitted with the NOI and must be implemented at the time the Site Specific Order for the facility is adopted by the Central Valley Water Board. In addition, the Waste Management Plan (WMP) submitted with the NOI must demonstrate that the existing facility's storage capacity is adequate or, if modifications are necessary to ensure adequate storage, the modifications must be complete by the time the Site Specific Order for the facility is adopted. See changes to Land Application Specifications D.1, Application for Coverage H. 6.c, Required Reports and Notices J.1 and 2, deletion of Table 1, WMP Sections II. B and IV. B, and the introduction to Attachment C.**

2. Comment: The tentative order/draft permit allows land application at a rate based on crop nitrogen removal only. The tentative order/draft permit lacks an explanation for using only a nitrogen-based nutrient application rate and an "after the fact" approach for addressing phosphorus. The tentative order/draft permit should include terms and conditions that address the requirement for a field-specific phosphorus transport risk assessment to determine the appropriate land application rate for phosphorus. If the tentative order/draft permit is not amended to include such a provision, then the Regional Board should, at a minimum, provide more information on the rationale and supporting material, if necessary, for choosing the nitrogen-based approach and how this approach is protective of water quality. The rationale should specifically discuss why phosphorus is not expected to cause or contribute to water quality problems in Central Valley receiving waters, and why an approach different from the field-specific approach for assessing nitrogen and phosphorus application rates and transport potential is appropriate for field and receiving water conditions in the Central Valley.

**Response: Because of the lack of surface water bodies having identified phosphorus impacts within watersheds containing dairies, the Regional**

**Board finds that a nitrogen-based approach for nutrient management will be at least as protective of water quality as the approach outlined in the Federal CAFO rule. As requested by the commenter, the Fact Sheet has been revised to include a new Section H, "Rationale for Not Basing Land Application Rates on Phosphorus" to specifically discuss why phosphorus is not expected to cause or contribute to water quality problems in Central Valley receiving waters and why the technical standards for nutrient application comply with the Federal CAFO regulations and are otherwise appropriate.**

Commenter B

**Comments by Deanne Meyer, Ph. D.  
Received 5 November 2010**

1. Comment: An attachment or fact sheet should be prepared to define the differences between the General Order for Existing Milk Cow Dairies, Order No. R5-2007-0035 (General Order) and this Order, or changes should be shown in an alternative font. Retain the same nomenclature for associated attachments where possible.

**Response: The Fact Sheet (Attachment F) outlines how this Order differs from the General Order. Additional guidance, including a version with the changes from the General Order will be provided in the future.**

2. Comment: Modify the following statements in the tentative Order:
  - a. Page 6, item 36 - remove statement about “many discharges of waste from milk cow dairies” as the statement is not substantiated by RB5 data provided since the adoption of the General Order;
  - b. Page 7, item 38 – modify or remove paragraph as most of the information is no longer applicable
  - c. Page 12, Prohibition 15 – modify to be consistent with the General Order as such a discharge should be prohibited if it occurs outside the operation of an NMP. It’s possible tailwater is ok to discharge to surface water within 60 days of land application of manure or process wastewater.
  - d. Page 15, item 18 – the requirement of a rain gauge is unnecessary as the CAFO rule only requires reporting of the 7 day rainfall in the event of an off-site discharge and can get that information in other ways.
  - e. Page 17, item 3 – include the words “for informational purposes” so that the nutrient analysis is not viewed as a guaranteed analysis subject to CDFA requirements
  - f. Page 19, Effluent limitation 2 – there is no recognized method to determine available N in soils. There is insufficient technical information to adequately provide guidance on this effluent limitation.

**Response: The response to each point is as follows:**

- a. Page 6, item 36 - **The annual number of enforcement actions in the Sacramento Office for off property discharges of waste since the adoption of Order No. R5-2007-0035 (General Order) in May 2007 has dropped to an average of 11/year in the three years since the General Order adoption from an average of**

- 21/year in the three years before the General Order adoption. Even eleven discharges/year constitutes “many” to staff, and the pre-General Order discharge statistics are skewed by the 29 off-property discharges that occurred during the 2004-2005 wet season. However, the word “many” has been removed.
- b. Page 7, item 38 – The paragraph has been removed as the NMP and the WMP are now required to be complete at the time the NOI is submitted, and the NMP is required to be completely implemented at the time the Site Specific Order is adopted, to comply with requirements in the Federal CAFO Rule.
  - c. Page 12, Prohibition 15 – Staff agrees that there is currently no technical justification for using 60 days as a basis for a discharge prohibition, Therefore, we are reverting to the General Order standards and have modified the prohibition to indicate that the discharge is prohibited unless sampled in accordance with the Monitoring and Reporting Program, the cropland is managed in accordance with a Nutrient Management Plan, and the discharge meets certain turbidity standards. The Nutrient Management Plan requirement is adequately protective without the additional discharge prohibition.
  - d. Page 15, item 18 – The requirement for an on-site rain gauge is part of the General NPDES Permit issued by USEPA Region 6 for CAFOs in New Mexico (Part II.A.2.a.ix.) that was considered in developing the tentative Order. However, the commenter is correct that the requirement does not appear in the Federal CAFO Rule and has been removed.
  - e. Page 17, item 3 – Language added.
  - f. Page 19, Effluent limitation 2 – Determination of plant-available nitrogen is a requirement of the Narrative Rate Approach in the CAFO Rule (see 40 CFR 122.42(e)(5)(ii)(A)).
3. Comment: Modify the following statements in Attachment C (NMP):
- a. Page C-11, Item B1a – modify paragraph to remove inconsistencies. Soil test results have limited value. Crop tissue test results have limited value in determining the planned rate of nutrient application for a future crop.
  - b. Page C-11, Item B2a – modify paragraph based on comments regarding limited use of soil N values. Pre-side dress soil analysis has not been utilized by California growers. The climate and the irrigation water delivery system provide greater impact on the availability and location of nitrate in soil than pre-plant or pre-side dressed soil analysis.
  - c. Page C-12, Item C1 – insert “water application” after the word “irrigation” in the first sentence.

**Response: The response to each point is as follows:**

- a. **Page C-11, Item B1a** - The language of this section is the same as the language in the General Order. Because the approach to nutrient application rates taken by the General Order has been useful since the General Order was adopted in 2007, the same approach is being taken by this Order. The language has not been changed.
- b. **Page C-11, Item B2a** - The language of this section is the same as the language in the General Order. Because the approach to nutrient application rates taken by the General Order has been useful since the General Order was adopted in 2007, the same approach is being taken by this Order. The language has not been changed.
- c. **Page C-12, Item C1** - The suggested change makes the intent clearer and has been added. The intent of the sentence was to make the statement that process wastewater application is not the same as irrigation water application.

4. Comments: Modify the following statements in Attachment D (MRP):

- a. Page MRP-2, top sentence – correct reference to the California Department of Health Services for certification of laboratories for methods related to solid manure, soil and plant tissue analysis as DHS does not do this certification.
- b. Page MRP-2, Table 1 – The CAFO rule does not require that the level be documented but that sufficient minimum capacity be determined.
- c. Page MRP-4, Table 2 – An appropriate date to begin soil sampling is the summer of 2013 (5 years after the 2008 state date under the General Order).
- d. Page MRP-9, Item B1 – Define or eliminate term “minimum elements of the nutrient management plan”. The minimum elements of the nutrient management plan are not described.
- e. Page MRP-9, Item B2e – Remove recordkeeping requirement unless obligated by CAFO Rule. The requirement to maintain records documenting storage design volume are all described in the WMO. It is already available at the facility and therefore redundant to include it within this list of record keeping requirements It also is not a typical record, but a report/set of calculations to determine required storage capacity.
- f. Page MRP-9, Item B3c – Remove “, or volume and density” to be consistent with Table (manure analytical requirements).
- g. Page MRP-10, Item 3j – Define as “Nutrient Budget” to reduce confusion between a nutrient budget (what is planned) vs actual recordkeeping data (quantifying what was done).

- h. Page MRP-10, Item 3k – Define as “nutrient application calculations” to reduce confusion as described in “h” above.
- i. Page MRP-10, Item 3m – Insert here or elsewhere the obligation that the operator must periodically inspect equipment used for land application of manure, litter, or process wastewater. Having a record keeping requirement absent the requirement to do the action will confuse people.
- j. Page MRP-13, Item 4 - Remove paragraph because it appears to require inclusion of detailed nutrient budgets fro each land application are annually. Additionally it includes a technical determination that soil nitrogen be considered in the calculation. It is unclear if there is anything gained by having operators provide field specific nutrient budgets as a component of their annual report.
- k. Page MRP-14, Item 13 – Make item consistent with Attachment C. Attachment C refers to a nutrient management specialist, the CAFO Rule refers to a nutrient management planner. Make consistent or identify in both areas that these are equivalent.

**Response: The response to each point is as follows:**

- a. Page MRP-2, top sentence – Water Code Section 13176 requires that “the analysis of any material required by this division shall be performed by a laboratory that has accreditation or certification pursuant to Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 or Division 101 of the Health and Safety Code.” Allowing a laboratory other than one certified by the California Department of Health Services to conduct analyses would violate Water Code Section 13176. The language has not been changed.
- b. Page MRP-2, Table 1 – Staff’s reading of the pertinent portion of the CAFO rule is that the actual depth of water in the lagoon must be determined on a weekly basis (see 40 CFR 412.37(b)(2) “Weekly records of the depth of the manure and process wastewater in the liquid impoundment as indicated by the depth marker under paragraph (a)(2) of this section...”).
- c. Page MRP-4, Table 2 – The section has been modified to remove the phrase “Beginning in the summer of 2008 and then...”.
- d. Page MRP-9, Item B1 – The phrase “minimum elements of the” has been removed and the phrase “, including the information described in 2-6 below” has been added following “(NMP)” to improve the clarity of this requirement.
- e. Page MRP-9, Item B2e – Records documenting the current design of ponds may be in the WMP, but may also be in separate plans and diagrams, depending when ponds were constructed. This requirement makes it clear that such information must be maintained at the dairy. The requirement has not been changed.

- f. Page MRP-9, Item B3c – The language “, or volume and density” has been removed.
  - g. Page MRP-10, Item 3j – The phrase “Nutrient Budget” has been added.
  - h. Page MRP-10, Item 3k – The phrase “Nutrient Application Calculations” has been added.
  - i. Page MRP-10, Item 3m – The requirement to inspect application equipment is already in the Tentative Order as the last requirement listed in Table 1 of the MRP.
  - j. Page MRP-13, Item 4 - This language is a mandatory portion of the annual report pursuant to 40 CFR 122.42(e)(2)(viii) which requires inclusion of the “results of calculations conducted in accordance with paragraphs....(e)(5)(ii)(D)”. Paragraph (e)(5)(ii)(D) requires that “CAFOs that use this approach must calculate maximum amounts of manure litter and process wastewater to be land applied at least once per year....” and requires that a “....field-specific determination of soil levels of nitrogen and phosphorus...” be included. The requirement has not been changed.
  - k. Page MRP-14, Item 13 – Changed “planner” to “specialist” to be consistent with language used in NMP (Attachment C).
5. Comment: In Appendix F, remove volume and density as options for data collection.

**Response: Appendix (sic) F (Fact Sheet) does not contain any references to volume and density. Volume and density have been removed from Attachment G (Manifest) in favor of measurement of tons and moisture content of solid manure shipped offsite.**

6. Comment: In addition to the specific comments above, please review comments from the UC Dairy Quality Assurance Workgroup submitted Nov 5, 2010 on draft revisions to the Monitoring and Reporting Program for Existing Milk Cow Dairies as these are applicable to this review as well.

**Response: The Central Valley Water Board will not review the comment letter dated 5 November 2010 prior to adoption of this Order nor will it provide specific responses to the comment letter. The comment letter was addressed to Doug Patteson of the Central Valley Water Board and transmitted comments on a draft revised Monitoring and Reporting Program for the General Order (Order No. R5-2007-0035). The comments in that letter were not prepared specifically for the Monitoring and Reporting Program (MRP) that is a part of this Order. The comments in that letter are not easily applied to provisions in this MRP since some of the provisions in this MRP are included specifically to satisfy requirements under the Federal CAFO Rule. The Central Valley Water Board will address the comments in the 5 November 2010 letter when it issues a Response to**

**Comments document prepared for the revised MRP for the General Order. The comment letter will not be added of the administrative record for this Order.**

Commenter C

**Comments by Ronald W. Rowe, Merced County Department of Public Health, Division of Environmental Health  
Received 5 November 2010**

1. Comment: Any adopted changes/components of the draft General Order NRP/NPDES should be included in written form into the facility's WMP or NMP. Optionally, RB-5 may in the body of the Dairy General Order MRP and NPDES revision incorporate by reference all specified changes as requirements of the dairy facility Operation and Maintenance Plan within the facility's WMP and Sampling and Analysis Plan within the NMP.

**Response: If the General Order is modified in the future, dairies that are required to or wish to receive coverage under this Tentative NPDES Order will likely need to resubmit their WMP and NMP, together with a new Notice of Intent. Prior to resubmittal, their WMP and NMP already prepared pursuant to the General Order will likely need to be revised to incorporate any changed requirements that are a part of the NPDES Order. Despite this likelihood, the issue is not before the Central Valley Water Board at this time; the Board is not required to speculate about how it may handle this issue in the future.**

2. Comment: Page MRP-2, Table 1, requires monthly pond photographs. The photography requirement should be modified to state that the depth marker and freeboard must be visible in the picture.

**Response: The language in the MRP has been modified to require that the photograph show the "height of liquid relative to the depth marker and the current freeboard..."**

3. Comment: In the MRP, total phosphorus and total potassium analyses are proposed. These analyses are potentially problematic. It would be better to require soil test phosphorus using either the Bray 1 method or the Olsen method, depending on the pH of the soil. The Soil Test Phosphorus Concentration would serve as a chemical evaluation of the capability of the soil, as represented by a soil sample, to supply plant available Phosphorus during the growing season to achieve a desired yield response. These preferred Phosphorus analyses methods provide

information in soils as soluble or plant available forms of phosphorus in contrast to total elemental phosphorus.

**Response: The Federal CAFO Rule, in 40 CFR 122.42(e)(5)(ii)(A) requires information on both total phosphorus and plant-available phosphorus in soils. The language in MRP Table 2 has been modified to indicate that both types of information are needed once every 5 years.**

4. Comment: The MRP revision should establish a Phosphorus Threshold or a meaningful assessment of mobile forms of phosphorus.

**Response: As outlined in the Fact Sheet (Attachment F), Section H, “Rationale for Not Basing Land Application Rates on Phosphorus”, phosphorus has not been identified as an issue in Central Valley surface waters. At this point, therefore, establishment of a Phosphorus Threshold appears to be premature. Should future data identify phosphorus as a cause of water quality problems in watersheds containing dairies, a Phosphorus Threshold or similar limit can be added to this Order.**

5. Comment: In the MRP, Total Fixed Solids (TFS) is proposed as a new analytical surrogate for determining total salt content in solid media, including plant tissue and manure. If TFS is used, RB-5 needs to promptly prepare and approve a computational method to convert TFS to total salt for reporting purposes.

**Response: Staff will evaluate possible methods for doing such a conversion.**

6. Comment: We support removing density and volume options for determining manure and crop harvest quantities.

**Response: Comment noted.**

7. Comment: Estimating the amount of process wastewater generated by a dairy facility is challenging. To ensure consistency within Region 5, we request Region 5 promptly prepare, approve, and require measurement reporting methods and a companion computational method to quantify the components that make up “process wastewater” generated by the facility for reporting purposes, and include these standards in the MRP revision.

**Response: We agree that estimating the amount of process wastewater generated by a dairy facility is challenging. For the purposes of this NPDES Order, a calculation of the estimated amount of process wastewater generated is required as part of the annual report (see 40 CFR 122.42(e)(4)(ii)). We will post any available Federal guidance on this subject on our website as part of the General Order Guidance page at:**

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/dairies/general\\_order\\_guidance/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/dairies/general_order_guidance/index.shtml) .

8. Comment: In all cases, reporting of “potassium” should be changed to “total potassium”.

**Response: Total Potassium is not used for liquid samples. The high amount of potassium in particulate forms that may be present in unfiltered water samples may produce inaccurately high potassium results. Total potassium is used for analyses of solid materials.**

9. Comment: Add to the MRP an annual reporting requirement to “Quantify the ratio of total nitrogen applied to land application areas and total nitrogen removed by crop harvest (nitrogen uptake)”.

**Response: This requirement has been added to the Annual Reporting requirements.**

10. Comment: RB-5 should request or require limited depth discrete, and in some cases continuous core soil sample collection with contaminant analyses and reporting from boreholes to assist the investigators in formulating the monitoring frequency and constituents schedule.

**Response: While the collection and analysis of soil core data can be very valuable in assessing the subsurface hydrogeology, it can also be expensive. Given the current economic situation with the dairy industry, core soil sample collection will not be required at this time.**

11. Comment: We recommend that RB-5 require or strongly recommends all General Order, NPDES, and Groundwater monitoring reporting be submitted electronically in a digital format acceptable to the Executive Officer.

**Response: The Regional and State Boards are evaluating the practicability of electronic data submittal across all programs. When a protocol for submitting data under this Order has been developed, Dischargers will be notified of the need to submit information electronically.**

Commenter D

**Comments by Michael L. H. Marsh, Western United Dairymen  
Received 5 November 2010**

1. Comment: This NPDES Permit seems to offer less water quality protection than the General Order because this NPDES permit allows the discharge of waste to surface waters under certain conditions and the General Order prohibits such discharges. Since the vast majority of dairies in the Central Valley are able to operate in compliance with the General Order, it seems that the Regional Board's objective should be to keep dairies covered under and in compliance with the General order and not have them covered under an NPDES permit. We question the need for this permit.

**Response: By definition, a National Pollutant Discharge Elimination System (NPDES) permit includes specifications allowing discharges to surface waters under certain limited conditions. Staff believes that the conditions under which discharge is allowed are rare and unusual enough such that the tentative NPDES permit is protective of water quality. US EPA requires states which administer any portion of the Federal NPDES Permit program to include the portion of the NPDES program regulating Concentrated Animal Feeding Operations. This permit will address that requirement for existing milk cow dairy facilities.**

2. Comment: Page 6, Finding 36 – This finding is misleading as very few dairies actually discharge wastewater to surface waters. The word “many” in the first line should be changed to “some”.

**Response: The word “many” has been removed from this finding.**

3. Comment: Page 7, Finding 37 - The sentence starting “The waste management systems at these existing dairies are commonly not capable of preventing adverse impacts...” should be removed or changed as it is inaccurate.

**Response: The sentence has been removed from this finding.**

4. Comment: Page 12, Prohibition A.15 – This prohibition disallows discharges of clean storm water from cropland within 60 days of a manure application. This prohibition should be based on the potential water quality

**Response: Prohibition A.15 addresses discharges of tailwater, not storm water. Storm water discharges are considered “agricultural storm water” by the US EPA and are exempt from regulation under the NPDES program as long as the discharges are precipitation-related and from cropland managed in accordance with a certified Nutrient Management Plan. Staff agrees that there is currently no technical justification for using 60 days as a basis for a tailwater discharge prohibition, Therefore, we are reverting to the General Order standards and have modified the prohibition to indicate that the discharge of tailwater is prohibited unless sampled in accordance with the Monitoring and Reporting Program, the cropland is managed in accordance with a Nutrient Management Plan, and the discharge meets certain turbidity standards. The Nutrient Management Plan requirement is adequately protective without the additional discharge prohibition.**

5. Comment: Page 15, General Specification B.18 – This specification requires that the dairy maintain a rain gauge. This specification should also allow information from a nearby rain gauge maintained by a local irrigation district or State agency to be suitable in place of an on-farm rain gauge.

**Response: The requirement for an on-site rain gauge is part of the General NPDES Permit issued by USEPA Region 6 for CAFOs in New Mexico (Part II.A.2.a.ix.) that was considered in developing the tentative Order. However, the requirement does not appear in the Federal CAFO Rule and has been removed.**

6. Comment: Page 19, Effluent Limitations E.2 – This provision requires that the maximum amount of manure that can be applied in a season be calculated before manure can be applied. This condition should not limit applications that are based on actual in-season analyses of the manure. The solids information should be removed from this paragraph, as those values may not be known when this budget is calculated. We question the usefulness of this requirement given that it would be submitted at the same time as the final nutrient accounting. This paragraph should be removed or otherwise state that the information calculated here is an estimate and not limit what happens as the crop is grown.

**Response: The language in this Effluent Limitation is a requirement of the Narrative Rate Approach in the CAFO Rule (see 40 CFR 122.42(e)(5)(ii)(A)) and as such must be included in this Order.**

7. Comment: As required by NPDES CAFO permit regulation, this permit requires that the terms of the NMP be incorporated into the permit. Since the NMP will be incorporated into this permit, the terms of the NMP must be allowed to be flexible and the process to modify an NMP under the permit must be streamlined.

**Response: While staff agrees with the commenter, the language of the CAFO Rule is very specific about what the NMP must contain, how the terms of the NMP are to be incorporated into the permit, and what steps must be taken for the NMP to be revised. This gives the Central Valley Regional Board minimal latitude in this matter. Dischargers who apply for this Order will be encouraged to include all cropland and crops that could conceivably be grown in an attempt to have the NMP be as versatile as possible.**

8. Comment: Attachment A, Page 3, Item H – Add berms and tailwater recovery systems to the list of land application best management practices to control runoff to surface water.

**Response: Berms and tailwater recovery systems have been added to the list.**

9. Comment: Attachment A, Page 4, CEQA Compliance – The language “Date of noticing of the tentative permit” is unclear.

**Response: The language of this section removed as it is an artifact of an earlier version of this tentative Order and no longer needed.**

10. Comment: Attachment C, Page C-6, Item VIII – These limitations should be in another part of the permit, perhaps the WMP, as they have nothing to do with agronomy and do not belong in the NMP.

**Response: Item VIII contains limitations on management of certain types of waste that are not manure or process wastewater. The text of the WMP (Attachment B) is list of information that must be included in the WMP, such as maps and flood calculations, Staff was unable to identify an appropriate location for the Item VIII limitation language within the WMP. The limitations have not been relocated from their current position.**

11. Comment: Attachment D, Table 1 – The requirement for weekly monitoring of storm water diversion devices should be changed to include only the winter months due to the region’s arid climate.

**Response: Weekly monitoring is required under the CAFO Rule (see 40 CFR 412.37 (a)(1)(i)).**

12. Comment: Attachment D, Table 2 – The table requires analyses of general minerals in both process wastewater and manure biennially. This should be removed from the MRP and research should be conducted to define correlation between total dissolved or fixed solids to general minerals. Then information only needs to be collected on farm to correlate the research to each individual farm, and conducted no more frequently than once every five years, if they are still needed to form that correlation.

**Response: General mineral analyses for water are useful to characterize water and compare water types. The requirement for general mineral analyses of wastewater has not been changed. The manure testing requirements have been changed to match the manure testing requirements in the Digester General Order: carbonate and bicarbonate testing has been removed, and sulfate has been replaced with sulfur.**

13. Comment: Attachment D, Table 2 – The mandatory soil sampling for analysis other than phosphorus should be made optional. At a minimum, this section should clarify that the soil sampling requirements are only required once every five years for all of the analyses and that 20% of the land application areas may be sampled each year.

**Response: The Federal CAFO rule requires information on the soil tests for both nitrogen and phosphorus, and tests must be done at least once during each five year permit cycle. The language for soil sampling has been modified to make this clear.**

14. Comment: Attachment D, Table 4 – The requirement for sampling ammonia and total dissolved solids should be removed. At a minimum, this sampling should not have to be continued after two years of non-detectable ammonia results for each individual well.

**Response: Staff feels that the information on ammonium and total dissolved solids is useful, as ammonium is an important indicator of lagoon leakage and direct connections (such as through an improperly abandoned well or poor well construction) between the surface and ground water). Information on total dissolved solids will be correlated with the EC measurements. However, language will be added allowing the Discharger to request a reduced monitoring frequency after two years of monitoring data that do not show detectable ammonium have been collected.**

15. Comment: Attachment D, Page MRP-10, Item 3e – Records of weather conditions at the time of manure application should not be required during the arid summer months but only from October 1 to April 30.

**Response: Records of weather conditions at the time of manure application are required under the CAFO Rule (see 40 CFR 412.37 (c)(3)).**

