TECHNICAL MEMORANDUM

Date: June 13, 2014

To: Darrin Polhemus, State Water Resources Control Board

From: Dr. Stuart W. Styles, ITRC Director
Sarah Crable, ITRC Engineer

Subject: Expert Panel Meeting Minutes – May 9, 2014

State Water Resources Control Board Nitrate Expert Panel

Expert Panel Chair, Dr. Charles Burt called the meeting of the Expert Panel to order at approximately 8:30 a.m. on Friday, May 9, 2014 in Sacramento.

1. Agenda .................................................................................. Dr. Charles Burt, Panel Chair

2. Introduction – Expert Panel Members
   Dr. Lowell Zelinski
   Daniel Munk
   Dr. Charles Burt
   James duBois
   Mark McKeen
   Robert Hutmacher
   Bill Brush
   Till Angermann

3. Expert Panel Charge......................................................... Dr. Charles Burt, Panel Chair

4. Invited Speaker #1 .......................................................... Dr. Thomas Harter, UC Davis
   • Explained sections of the UC Davis Report findings “Addressing Nitrate in California’s Drinking Water with a Focus on Tulare Lake Basin and Salinas Valley Groundwater”
   • Answered questions from Expert Panel members

Irrigation Training & Research Center
5. **Expert Panel Discussion**
   - Comments on nitrogen balance

6. **Invited Speaker #2** ............................................. **Brock Taylor, Certified Crop Advisor**
   - Commented on past and current grower water and nutrient management practices
   - Answered questions from Expert Panel members

7. **Invited Speaker #3** ............................................. **Dr. Toby O’Geen, UC Davis**
   - Commented on Nitrogen Leaching Hazard Index (NHI) benefits and shortcomings
   - Commented on improvement to the NHI
   - Answered questions from Expert Panel members

8. **Public Comment #1** ............................................. **John Dickey, PlaneTierra LLC**
   - Commented on existing Waste Discharge Requirements
   - Commented on Nitrogen Hazard Index as a tool for preliminary assessment of risk
   - Commented on assessing risk with Groundwater Quality Assessment Reports
   - Commented on nitrogen consumption ratios versus mass balance approaches in nitrogen management planning
   - Answered questions from Expert Panel members

9. **Public Comment #2** ............................................. **Bob Blakely, California Citrus Mutal**
   - Commented on variability being addressed in context of overall management system considering both surface water and groundwater
   - Commented on addressing nitrate problems on a local and regional level
   - Discussed retiring acreage as a solution
   - Commented on tweaking Nitrogen Hazard Index and mass balance
   - Commented on data collection and how the Regional Board will use the information reported by growers

10. **Public Comment #3** ............................................. **Bud Hoekstra, Berry Blest Organic Farm**
    - Commented on nitrate regulations in the Chesapeake area on the East Coast of the United States
    - Commented on interaction of fertilizers and pesticides

11. **Public Comment #4** ............................................. **Patrick Brown, UC Davis**
    - Commented on perennial tree crop nitrate consumption
    - Commented on education of nutrient uptake by plants requirement of CCAs, growers, or other advisors
    - Commented on nitrate monitoring in soils
    - Commented on Expert Panel acknowledging recommendations’ applicability to certain crop types
    - Answered questions from Expert Panel members
   • Commented on groundwater sampling
   • Commented on best management practices
   • Answered questions from Expert Panel members

13. Public Comment #6  ......................................................... Jim Parsons, Farmer
   • Commented on data to be collected from growers
   • Commented on record keeping of data on his own property

14. Public Comment #7  ................................................................. Dr. Karl Longley,
   Central Valley Regional Water Quality Control Board
   • Thanked the Expert Panel members
   • Commented on management of groundwater recharge

15. Public Comment #8  ......................... Tim Johnson, California Rice Commission
   • Commented on California Rice Commission’s surface water quality program
   • Commented on reporting of nitrogen mass balance
   • Answered questions from the Expert Panel members

16. Public Comment #9  ................................. Steve Shimek, The Otter Project
   • Commented on Dr. Harter’s “Three Track Monitoring Approach”
   • Commented on discharge monitoring from higher risk farms
   • Commented on public reporting of monitoring results
   • Answered questions from the Expert Panel members

17. Public Comment #10  .............................. Jennifer Clary, Clean Water Action
   • Commented on Clean Water Action’s goals with the Irrigated Lands Regulatory Program

18. Public Comment #11  .............................. J.P. Cativiela, Dairy CARES
   • Commented on the Expert Panel questions #5, #6, #9 and #10, and how dairies in
     the Central Valley are dealing with those same questions in relation to their Waste
     Discharge Requirements (WDR)
   • Commented on cost to dairies to comply with the WDR for dairies in the Central
     Valley
   • Commented on Dairy’s version of the Management Practice Evaluation Program
   • Commented on the California Dairy Quality Assurance Program in relation to
     Expert Panel question #8c
   • Answered questions from Expert Panel members
19. Clarification Item #1 .................................................................................................. Clay Rodgers, Central Valley Regional Water Quality Control Board
   • Encouraged Expert Panel to be aware of the Central Valley dairies’ waste Discharge Requirements and the work that has been completed by dairies so far
   • Commented on Central Valley Regional Water Quality Control Board staff’s mission

20. Clarification Item #2 .......... Darrin Polhemus, State Water Resources Control Board
   • Clarified Expert Panel’s role and directed the Expert Panel to focus on the thirteen questions posed to them

21. Expert Panel Discussion
   • Set up schedule for next meetings

Dr. Charles Burt adjourned the meeting at approximately 4:45 p.m. on May 9, 2014. The next scheduled Expert Panel meeting will be held on June 9, 2014 in San Luis Obispo.