

LATE REVISIONS – 6 June 2014

- Item 15 Baker Commodities, Inc., Kerman Rendering Plant, Fresno County – Consideration of Revised Waste Discharge Requirements Order 95-45 and New Time Schedule Order.**

Provision G.7

Page 19. Edit Provision G.7 of the Waste Discharge Requirements as follows:

7. By 5 December 2014, the Discharger shall provide ***an evaluation of the effectiveness of the existing groundwater monitoring well network to monitor any effects that discharge of wastewater to the lined ponds might have on underlying groundwater. If the evaluation concludes that additional groundwater monitoring wells are required, the Discharger shall also provide a*** Groundwater Monitoring Well Installation Work Plan for describing a plan for installation of additional groundwater monitoring wells. The additional monitoring well locations, construction, and number of wells shall be chosen to provide sufficient information to assess groundwater conditions upgradient and downgradient of the lined wastewater ponds. The work plan shall include a time schedule for implementation of the work and collection of the first round of samples from each well (in accordance with MRP R5-2014-####), which shall be completed by no later than 5 June 2015.

Monitoring and Reporting Program

Page 2. Edit the sample collection frequency in the table in the Pond Influent Monitoring section by adding footnote 4 as follows:

POND INFLUENT MONITORING (EFF-001)

Pond influent samples shall be collected at monitoring location EFF-001, as described above. Pond influent monitoring shall include at least the following:

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Continuous	Flow	mgd	Meter
Weekly	pH	pH Units	Grab
Weekly	EC	umhos/cm	Grab
Weekly	12-Month Running Average EC ^{1,2}	umhos/cm	-
Monthly ⁴	BOD ₅	mg/L	Grab
Monthly ⁴	TSS	mg/L	Grab
Monthly ⁴	Nitrate as nitrogen	mg/L	Grab
Monthly ⁴	Nitrite as nitrogen	mg/L	Grab
Monthly ⁴	TKN	mg/L	Grab
Monthly ⁴	Ammonia as nitrogen (NH ₃ -N)	mg/L	Grab
Monthly ⁴	Total Nitrogen ¹	mg/L	-
Monthly ⁴	TDS	mg/L	Grab
Monthly ⁴	FDS	mg/L	Grab

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Quarterly	General Minerals ³	mg/L	Grab

¹ Calculated value.

² The EC readings for the current month averaged with EC readings for the previous 11 months.

³ Samples analyzed for metals shall be filtered with a 0.45 micron filter prior to preservation, digestion, and analysis.

⁴ ***Samples shall be collected monthly for 12 months and then quarterly thereafter.***

Page 3. Edit the sample collection frequency in the table in the Pond Effluent Monitoring section by adding footnote 4 as follows:

POND EFFLUENT MONITORING (EFF-002)

Effluent samples shall be collected at monitoring location EFF-002, as described above. Effluent monitoring shall include at least the following:

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Continuous	Flow	mgd	Meter
Weekly	pH	pH Units	Grab
Weekly	EC	umhos/cm	Grab
Weekly	12-Month Running Average EC ^{1,2}	umhos/cm	-
Monthly ⁴	BOD ₅	mg/L	Grab
Monthly ⁴	TSS	mg/L	Grab
Monthly ⁴	Nitrate as nitrogen	mg/L	Grab
Monthly ⁴	Nitrite as nitrogen	mg/L	Grab
Monthly ⁴	TKN	mg/L	Grab
Monthly ⁴	Ammonia as nitrogen (NH ₃ -N)	mg/L	Grab
Monthly ⁴	Total Nitrogen ¹	mg/L	-
Monthly ⁴	TDS	mg/L	Grab
Monthly ⁴	FDS	mg/L	Grab
Monthly ⁴	General Minerals ³	mg/L	Grab

¹ Calculated value.

² The EC readings for the current month averaged with EC readings for the previous 11 months.

³ Samples analyzed for metals shall be filtered with a 0.45 micron filter prior to preservation, digestion, and analysis.

⁴ ***Samples shall be collected monthly for 12 months and then bimonthly thereafter.***

Page 5. Edit the sample type in the table in the Soil Monitoring section by revising footnote 1 as follows:

SOILS MONITORING (SS-001 THROUGH SS-004)

Representative locations shall be established for soil profile sampling. At least three locations shall be selected to represent LAAs soils. At least one sample location shall be selected to represent background soil conditions. The Discharger shall submit proposed sample locations to the Central Valley Water Board for written staff approval before collecting samples. Soil samples shall be collected as follows:

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Annually	Soil pH	pH Units	Grab ¹
Annually	Electrical Conductivity	µmhos/cm	Grab ¹
Annually	Nitrate	mg/kg	Grab ¹
Annually	Ammonia	mg/kg	Grab ¹
Annually	TKN	mg/kg	Grab ¹
Annually	Total Nitrogen	mg/kg	Grab ¹
Annually	Soil Organic Matter	% by dry weight	Grab ¹
Once ³	Cation Exchange Capacity	meq/100g ²	Grab ¹

¹ Samples shall be collected at 6 inches, 2 feet, 4 feet, and 6 feet. ***If refusal is encountered at a depth shallower than 6 feet using standard soil sampling techniques, the deepest soil samples shall be collected at the depth of refusal.***

² Milliequivalents per 100 grams.

³ During the first round of soil samples collected following adoption of this Order.

Page 6. Edit the sample collection frequency in the table in the Groundwater Monitoring section by adding footnote 6 as follows:

GROUNDWATER MONITORING

After measuring water levels and prior to collecting samples, each monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 volumes of standing water within the well casing and screen, or additionally the filter pack pore volume.

Upon completion of groundwater monitoring well installation and development, the Discharger shall monitor all wells in its Groundwater Monitoring Well Network, and any additional wells installed pursuant to this Order, for the following:

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
Quarterly ⁶	Depth to groundwater	feet ¹	Measured
Quarterly ⁶	Groundwater Elevation ²	feet ³	-
Quarterly ⁶	pH	pH Units	Grab
Quarterly ⁶	EC	umhos/cm	Grab
Quarterly ⁶	Nitrate as nitrogen	mg/L	Grab
Quarterly ⁶	Nitrite as nitrogen	mg/L	Grab
Quarterly ⁶	TKN	mg/L	Grab
Quarterly ⁶	Ammonia as nitrogen	mg/L	Grab
Quarterly ⁶	Total Nitrogen ²	mg/L	-
Quarterly ⁶	TDS	mg/L	Grab
Quarterly ⁶	SAR ²	mg/L	-
Quarterly ⁶	Total Organic Carbon	mg/L	Grab
Quarterly ⁶	General Minerals	mg/L	Grab
Annually ⁴	Metals ⁵	mg/L	Grab

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<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
1	To nearest hundredth of a foot.		
2	Calculated value.		
3	To nearest hundredth of a foot above Mean Sea Level.		
4	In July.		
5	Metals analysis shall include: aluminum, arsenic, copper, iron, lead, manganese, molybdenum, nickel, uranium, vanadium and zinc.		
6	<i>Samples shall be collected quarterly from each groundwater monitoring well until the data set for a well contains a minimum of 12 valid sample results. Once the data set contains 12 valid sample results, the frequency of sample collection for that well shall be reduced to semiannually. If the data set for any groundwater monitoring well already contains 12 valid sample results collected within the last five years, the frequency of sample collection for that well shall be semiannually.</i>		

Time Schedule Order R5-2014-XXXX

Page 8. Edit the table summarizing the time schedule to comply with Effluent Limitations B.1 and B.2 for EC and chloride as follows:

1. The Discharger shall comply with WDRs R5-2014-XXXX, Effluent Limitations B.1 and B.2 for EC and chloride, in accordance with the following time schedule:

<u>Task</u>	<u>Task Description</u>	<u>Due Date</u>
a.	Consistent with an approved Salinity Control Plan required by WDRs R5-2014-XXXX, Provision G.8, submit, for Executive Officer approval, a detailed list of salinity source control measures, treatment measures, and other measures Baker plans to implement to reduce the salinity of water applied to the Land Application Area to comply with a detailed implementation schedule for the particular measures Baker will implement to reduce the salinity of the discharge that will result in compliance with WDRs R5-2014-XXXX Effluent Limitations B.1 and B.2. The implementation schedule shall include the beginning dates of implementation of the selected source control and/or treatment measures, the projected date for full compliance with WDRs R5-2014-XXXX Effluent Limitations B.1 and B.2, and all interim milestone dates.	3 September 2015 or 60 days following Executive Officer approval of the Salinity Control Plan required by WDRs R5-2014-XXXX, Provision G.8, whichever is sooner.
b.	Submit a 50% Completion Report that documents implementation of 50% of the salinity source control measures and other measures and 50% of the design of the treatment methods identified in Task 1.a.	When 50% of the salinity source control measures and other measures are implemented and 50% of the treatment method design is complete, but by no later than

		3 September 2018.
c.	Submit a 75% Completion Report that documents implementation of 75% of the salinity source control measures and other measures and 75% of the design of the treatment methods identified in Task 1.a.	When 75% of the salinity source control measures and other measures are implemented and 75% of the treatment method design is complete, but by no later than 3 September 2019.
d.	Submit a Final Report that documents complete implementation of salinity source control measures and other measures and final design of the treatment methods identified in Task 1.a. The Final Report shall identify whether or not implementation is progressing on schedule and whether or not the salinity source control measures, other measures, and treatment methods continue to be viable options.	When full implementation of the salinity source control measures and other measures are complete and final design of the treatment methods identified in Task 1.b is complete, but by no later than 4 September 2020.
e.	Begin construction of the treatment methods identified in Task 1.a.	As soon as possible following completion of design, but by no later than 4 March 2021.
f.	Complete construction of the treatment methods identified in Task 1.a.	3 March 2023.
g.	Submit annual progress reports documenting implementation of the salinity source control measures, treatment measures, and other measures identified in Task 1.a. selected salinity reduction method (Task 1.a).	Beginning 1 February 2016, by the first day of February each year until the Discharger has completed Task 1. h.
h.	Submit documentation that Baker has sufficiently reduced the salinity of the water applied to the Land Application Area in accordance consistently complies with WDRs R5-2014-XXXX, Effluent Limitation B.1 for EC and Effluent Limitation B.2 for chloride. Specifically, the 12-month rolling average EC of the discharge shall not exceed the 12-month	In accordance with the approved schedule (Task 1.a) but by no later than 3 February 2025.

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	flow weighted average EC of the source water plus 500 umhos/cm and the concentration of chloride in the discharge shall not exceed 175 mg/L after implementation of the proposed salinity reduction method.	
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