



JUL 13 2017

Ben Pitman
Pitman Family Farms
1075 North Ave
Sanger, CA 93657

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: S-7126
Project Number: S-1163782

Dear Mr. Pitman:

Enclosed for your review and comment is the District's analysis of Pitman Family Farms' application for an Authority to Construct for modification of the existing broiler chicken ranch to increase the bird capacity in the existing barns, install 20 new barns for a total capacity of 1,140,000 broilers and to allow for an increase in manure production capacity, at 8777 & 8631 Road 88 and 8688 Road 84, Pixley, CA.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Robert Gilles of Permit Services at (559) 230-5804.

Sincerely,

fr Arnaud Marjollet
Director of Permit Services

AM:rpg

Enclosures

cc: Tung Le, CARB (w/ enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
 Increase Broiler Ranch Flock Size and Install New Broiler Houses

Facility Name: Pitman Family Farms
 Mailing Address: 1075 North Ave
 Sanger, CA 93657

Date: July 12, 2017
 Engineer: Jesse A. Garcia /
 Robert Gilles

Lead Engineer: Joven Refuerzo

Contact Person: Ben Pitman
 Telephone: (559) 904-0484
 E-Mail: ben@maryschickens.com
 Application #(s): S-7126-1-4, -1-5, -2-4, and -2-5
 Project #: S-1163782
 Deemed Complete: February 1, 2017

I. Proposal

The primary business of Pitman Family Farms is the production of poultry to provide meat for human consumption. Pitman Family Farms has submitted an Authority to Construct (ATC) application to increase the flock size (broiler limits) under permit unit S-7126-1 as follows:

Pre-project broiler limits (PTO S-7126-1-3):

Pre-Project Broiler Limits (PTO S-7126-1-3)				
House #s	# of Houses	House Dimensions, L ft x W ft	House Area, ft ² (ea.)	# of Birds per House
1-3	3	512 x 50	25,600	28,000
4-19	16	606 x 50	30,400	33,000
Total	19	---	---	612,000

Proposed post-project broiler limits (ATC S-7126-1-4):

Post-Project Broiler Limits (ATC S-7126-1-4)					
House #s	# of Houses	House Dimensions, L ft x W ft	House Area, ft ² (ea.)	Bird Formula, ft ² /bird	# of Birds per House
1-3	3	512 x 50	25,600	0.8	32,000
4-19	16	608 x 50	30,400	0.8	38,000
Total	19	---	---	0.8	704,000

Note that, as seen above, the applicant has proposed to correct the barn dimension from 606' to 608'. This correction is not the result of a modification and does not affect emissions assumptions or calculations. This correction only affects a condition on permit unit S-7126-1.

Additionally, the applicant has proposed to further expand the facility by constructing 20 additional broiler houses for a total of 39 broiler houses and 1,140,000 broilers. ATC S-7126-1-5 will be issued for this proposed modification. A summary of the proposed new houses is provided in the following table:

Post-Project Broiler Limits (ATC S-7126-1-5)					
House #s	# of Houses	House Dimensions, L ft x W ft	House Area, ft ² (ea.)	Bird Formula, ft ² /bird	# of Birds per House
Existing: 1-3	3	512 x 50	25,600	0.8	32,000
Existing: 4-19	16	608 x 50	30,400	0.8	38,000
Proposed New: 20-39	20	500 x 54	27,000	0.8	33,750
Total Houses	39				
Maximum facility capacity, # birds					1,379,000
Proposed flock limit, # birds (from the county use permit limit)					1,140,000

Note that the total capacity of the facility is greater than the 1,140,000 broiler limit from the county use permit; therefore, ATC -1-5 will limit the total flock size to not exceed 1,140,000 birds.

This multi-phased modification proposal will require the facility to implement ATC -1-4 (to increase the existing broiler limits) prior to or concurrently with implementation of ATC -1-5 (to construct 20 additional broiler houses and increase the total flock size).

Additionally, as a result of the increases in flock size, the applicant is proposing to modify the manure handling operation, permit unit S-7126-2, for increase in manure throughput. ATC S-7126-2-4 will be issued for the increase in manure throughput from the change from 612,000 birds to 704,000 birds and ATC S-7126-2-5 will be issued for the increase in manure throughput from the change from 704,000 birds to 1,140,000 birds.

The following conditions will be included on each ATC as shown as a mechanism to enforce compliance.

ATC S-7126-1-5

- Authority to Construct (ATC) S-7126-1-4 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201]

ATC S-7126-2-4

- Authority to Construct (ATC) S-7126-1-4 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201]

ATC S-7126-2-5

- Authorities to Construct (ATCs) S-7126-1-5 and S-7126-2-4 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201]

II. Applicable Rules

Rule 1070	Inspections (12/17/92)
Rule 2201	New and Modified Stationary Source Review Rule (2/18/16)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4550	Conservation Management Practices (CMP) (8/19/04)
Rule 4570	Confined Animal Facilities (CAF) (10/21/10)
California Health and Safety Code (CH&SC)	41700: Health Risk Assessment
California Health and Safety Code (CH&SC)	42301.6: School Notice
Public Resources Code (PRC)	21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14	15000-15387: CEQA Guidelines

III. Project Location

The facility is located at 8777 & 8631 Road 88 and 8688 Road 84 in Pixley, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

Broiler Chicken Operation

Each proposed broiler house is partially enclosed and is served by 13 exhaust fans with a rating of 1 hp each and 3 circulating fans with a rating of 0.5 hp each for a total of 14.5 hp per house. This broiler chicken ranch raises free-range chickens and each existing and proposed new house will have openings along one side; the proposed houses will have a 5 ft wide by 2 ft high opening every 50 feet. These openings allow for free chicken movement between inside and outside of the houses. Thus, the houses are served by a mechanical ventilation system but due to the "free-range" openings, the houses are not fully enclosed.

See project S-1141291 for additional detail on the existing process.

Manure Handling

The facility is requesting an increase from 5,000 tons of litter produced per year to 10,000 tons of litter per year as a result of the increase in the bird limit. Litter is hauled off-site. See project S-1141291 for additional detail on the existing process.

V. Equipment Listing

Pre-Project Equipment Description:

- S-7126-1-3: BROILER CHICKEN RANCH CONSISTING OF 612,000 BROILERS; 19 MECHANICALLY VENTILATED POULTRY HOUSES, INCLUDING FANS TOTALING 266 ELECTRIC HP
- S-7126-2-3: SOLID MANURE HANDLING SYSTEM CONSISTING OF OPEN LITTER STOCK PILES WITH LITTER HAULED OFFSITE

Proposed Modification:

Increase the bird limit from 612,000 broilers to 704,000 broilers and allow an increase in the manure throughput as a result of the bird limit increase.

- S-7126-1-4: MODIFICATION OF BROILER CHICKEN RANCH CONSISTING OF 612,000 BROILERS; 19 MECHANICALLY VENTILATED POULTRY HOUSES, INCLUDING FANS TOTALING 266 ELECTRIC HP: INCREASE THE BIRD LIMIT FROM 612,000 TO 704,000 BROILERS

- S-7126-2-4: MODIFICATION OF SOLID MANURE HANDLING SYSTEM CONSISTING OF OPEN LITTER STOCK PILES WITH LITTER HAULED OFFSITE: ALLOW AN INCREASE IN THE MANURE THROUGHPUT DUE TO AN INCREASE IN THE BROILER LIMIT FROM 612,000 TO 704,000

Install 20 new broiler houses, increase the bird limit from 704,000 broilers to 1,140,000 broilers, and allow an increase in the manure throughput as a result of the bird limit increase.

- S-7126-1-5: MODIFICATION OF BROILER CHICKEN RANCH CONSISTING OF 704,000 BROILERS; 19 MECHANICALLY VENTILATED POULTRY HOUSES, INCLUDING FANS TOTALING 266 ELECTRIC HP: INCREASE THE BIRD LIMIT FROM 704,000 TO 1,140,000 BROILERS AND CONSTRUCT TWENTY NEW BROILER HOUSES WITH THIRTEEN, 1 HP ELECTRIC FANS AND THREE 0.5 HP ELECTRIC FANS EACH

- S-7126-2-5: MODIFICATION OF SOLID MANURE HANDLING SYSTEM CONSISTING OF OPEN LITTER STOCK PILES WITH LITTER HAULED OFFSITE: ALLOW AN INCREASE IN THE MANURE THROUGHPUT DUE TO AN INCREASE IN THE BROILER LIMIT FROM 704,000 TO 1,140,000

The following table provides a summary of all broiler houses and the electrical motors.

Broiler House Properties						
House #	Length, ft	Width, ft	# of Houses	Electrical Fans	Total Rating, hp	Source
1-3	512	50	3	10 fans @ 1 hp = 10 hp + 4 fans @ ½ hp = 2 hp Total 12 hp each barn	36	Applicant
4-19	608	50	16	12 fans @ 1 hp = 12 hp + 4 fans @ ½ hp = 2 hp Total 14 hp each barn	224	Applicant
20-39	500	54	20	13 fans @ 1 hp = 13 hp + 3 fans @ ½ hp = 1.5 hp Total 14.5 hp each barn	290	Applicant
Total Electrical Motor Rating =					550	hp

Post Project Equipment Description:

- S-7126-1-4: BROILER CHICKEN RANCH CONSISTING OF 704,000 BROILERS; 19 MECHANICALLY VENTILATED BROILER HOUSES, INCLUDING FANS TOTALING 266 ELECTRIC HP
- S-7126-1-5: BROILER CHICKEN RANCH CONSISTING OF 1,140,000 BROILERS; 39 MECHANICALLY VENTILATED BROILER HOUSES, INCLUDING FANS TOTALING 550 ELECTRIC HP
- S-7126-2-4: SOLID MANURE HANDLING SYSTEM CONSISTING OF OPEN LITTER STOCK PILES WITH LITTER HAULED OFFSITE
- S-7126-2-5: SOLID MANURE HANDLING SYSTEM CONSISTING OF OPEN LITTER STOCK PILES WITH LITTER HAULED OFFSITE

VI. Emission Control Technology Evaluation

Broiler Houses

The principal pollutants emitted from poultry houses are Volatile Organic Compounds (VOC), particulate matter (PM), ammonia (NH₃), which are emitted through the ventilation system. Factors that affect emissions from broiler houses include the moisture content of the litter; the pH; the ventilation rate; the temperature; and the amount of manure and length of the time the manure is present in the broiler house.

The ventilation rate affects the amount of ammonia, VOC, and PM carried out of the broiler house. During the growth of the flock, continuous airflow removes ammonia and other gases and reduces the moisture content of freshly excreted manure. The constant volatilization and removal of ammonia from the broiler houses results in lower nitrogen content of the litter.

The applicant will implement mitigation measures to reduce VOC as required by District Rule 4570 as well as adding acidifying litter amendments with all birds fed in accordance with National Research Council (NRC) and all mortality removed from houses twice per day.

Manure Handling

The applicant is not proposing to modify the existing manure handling operation except to increase the throughput. See project S-1141291 for additional detail on emission control techniques.

VII. General Calculations

A. Assumptions

- To streamline emission calculations, PM_{2.5} emissions are assumed to be equal to PM₁₀ emissions
- For poultry houses, the relationship between PM, PM₁₀, and PM_{2.5} is as follows and is from page 70 of "Southeastern Broiler Gaseous and Particulate Matter Emissions Monitoring"¹ (December 2009) by Iowa State University and University of Kentucky (see Appendix F)
 - PM is 250% (1/0.40) of PM₁₀
 - PM_{2.5} is 10% of PM₁₀
- ATC S-7126-1-4 (increase broiler limit for existing houses):
 - Pre-project bird limit: 612,000 broilers (current PTO -1-3)
 - Post-project bird limit: 704,000 birds (proposed by applicant)
- ATC S-7126-1-5 (construct 20 new houses and increase total flock size):
 - Pre-project bird limit: 704,000 broilers (ATC S-7126-1-4)
 - Post-project bird limit: 1,140,000 birds (proposed by applicant to not exceed the County approved limit)
- ATC S-7126-2-4 (increase manure throughput):
 - Pre-project manure production is based on a conservative factor of 14.2 lb-litter/bird-year calculated as follows using applicant-provided information for the post-project production rate:
 - $5,000 \text{ tons-litter/year} \times 2,000 \text{ lb/ton} \div 704,000 \text{ birds} = 14.2 \text{ lb-litter/bird-year}$
 - Post-project manure production: 5,000 tons-litter per year (per applicant)

¹ http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1006&context=abe_eng_reports&sei-redir=1&referer=http%3A%2F%2Fwww.bing.com%2Fsearch%3Fq%3DFinal%2BProject%2BReport%2Bon%2BSoutheastern%2BBroiler%2BGaseous%2Band%2BParticulate%2BMatterEmissions%2BMonitoring%2B%28December%2B2009%29%2Bby%2BIowa%2BState%2BUniversity%2Band%2BUniversity%2BofKentucky%26src%3DIE-SearchBox%26FORM%3DIESR02#search=%22Final%20Project%20Report%20Southeastern%20Broiler%20Gaseous%20Particulate%20MatterEmissions%20Monitoring%20%28December%202009%29%20by%20Iowa%20State%20University%20University%20ofKentucky%22

- There are no emissions calculations for the manure handling permit unit since emissions from handling solid manure/litter are included in the emission factors used for the broiler houses.
- ATC S-7126-2-5 (increase manure throughput):
 - Pre-project manure production: 5,000 tons-litter per year (per applicant)
 - Post-project manure production: 10,000 tons-litter per year (per applicant)
 - There are no emissions calculations for the manure handling permit unit since emissions from handling solid manure/litter are included in the emission factors used for the broiler houses.

B. Emission Factors

Broiler Houses: Permit Unit S-7126-1

The emission factors for a broiler ranch are on a per head basis and account for emissions from the broiler housing and solid manure handling in one emission factor for each pollutant. The uncontrolled emissions factors are shown in the table below:

Uncontrolled Emission Factors for Broiler Ranch		
Pollutant	EF, lb/bird-year	Source
PM ₁₀	0.02	R.E. Lacey ²
VOC	0.025	Rule 4570 Staff Report
NH ₃	0.0958	CARB Source Test Results for California Broiler Houses ³

The facility has proposed to retain the mitigation measures as required on the current PTO and as originally proposed under project S-1141291. The following table summarizes the mitigation measures implemented at this facility along with the corresponding VOC control efficiency for each mitigation measure:

Broiler House Mitigation Measure Requirements		
		VOC Control Efficiency (%)
Feed:		
1	Feed according to NRC guidelines.	10

² "Particulate Matter and Ammonia Emission Factors for tunnel-Ventilated broiler houses in the Southern US", R.E. Lacey, J.S. Redwine, C.B Parnell, Jr.

³ "Quantification of Gaseous Emissions from California Broiler Production Houses" - Source tests were conducted on mechanically ventilated broiler houses during the spring and fall of 2004. The participants in the project include the following: AIRx Testing; California Air Resources Board; California Department of Food and Agriculture; California Poultry Federation; Foster Farms; & University of California, Davis - Animal Science.

Housing:		
2	Use a dry housing cleaning method at all times, except when a wet cleaning method is required for animal health or biosecurity issues, pursuant to Section 5.4.	10
3	Use drinkers that do not drip continuously.	10
4	Inspect drinkers at least once every seven (7) days and adjust the height, volume, and location of drinkers if necessary, and Inspect water pipes and drinkers and repair leaks daily.	10
Solid Manure/Separated Solids:		
5	Within seventy-two (72) hours of removal from housing: a. Remove all litter/manure from the facility. b. Cover litter/manure outside the housing with a weatherproof covering from October through May, except for times when wind events remove the covering, not to exceed twenty-four (24) hours per event.	0*

*No control efficiency has been established for the mitigation measures for solid manure, although emissions reductions are expected.

The control efficiencies for the selected mitigation measures are only be applied to VOC emissions. Therefore, the VOC emission factor is calculated as follows:

$$\begin{aligned}
 \text{VOC EF} &= \text{EF} \times (1 - \text{CE}) \times (1 - \text{CE}) \times (1 - \text{CE}) \times (1 - \text{CE}) \\
 &= (0.025 \text{ lb-VOC/hd-yr}) \times (1 - 0.1) \times (1 - 0.1) \times (1 - 0.1) \times (1 - 0.1) \\
 &= 0.016 \text{ lb-VOC/hd-yr}
 \end{aligned}$$

There is no control applied to the NH₃ and PM₁₀ emission factors. Thus, the emission factors for each pollutant for the broiler ranch are summarized in the following table.

Controlled Emission Factors for Broiler Ranch		
Pollutant	EF, lb/bird-year	Source
PM ₁₀	0.02	R.E. Lacey ⁴
VOC	0.016	Rule 4570 Staff Report with Control Efficiencies for Mitigation Measures
NH ₃	0.0958	CARB Source Test Results for California Broiler Houses ⁵

⁴ "Particulate Matter and Ammonia Emission Factors for tunnel-Ventilated broiler houses in the Southern US", R.E. Lacey, J.S. Redwine, C.B Parnell, Jr.

⁵ "Quantification of Gaseous Emissions from California Broiler Production Houses" - Source tests were conducted on mechanically ventilated broiler houses during the spring and fall of 2004. The participants in the project include the following: AIRx Testing; California Air Resources Board; California Department of Food and Agriculture; California Poultry Federation; Foster Farms; & University of California, Davis - Animal Science.

Manure Handling: Permit Unit S-7126-2

As previously mentioned in Section VII.A, emissions from handling solid manure/litter are included in the emission factors used for the broiler houses; therefore, there are no separate emission factors for this permit unit.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Broiler Houses: Permit Unit S-7126-1

Annual PE1

Annual PE1 is calculated for each size of broiler house and each pollutant using the following formula:

$$\text{Annual PE1} = \text{EF, lb/bird-year} \times \# \text{ of Birds in a House} \times \# \text{ of Houses of the Type}$$

512 ft x 50 ft houses (3 houses)

$$\begin{aligned} \text{Annual PE1 PM}_{10} &= 0.02 \text{ lb-PM}_{10}/\text{bird-year} \times 28,000 \text{ birds/house} \times 3 \text{ houses} \\ &= 1,680 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{Annual PE1 VOC} &= 0.016 \text{ lb-VOC/bird-year} \times 28,000 \text{ birds/house} \times 3 \text{ houses} \\ &= 1,344 \text{ lb-VOC/year} \end{aligned}$$

$$\begin{aligned} \text{Annual PE1 NH}_3 &= 0.0958 \text{ lb-NH}_3/\text{bird-year} \times 28,000 \text{ birds/house} \times 3 \text{ houses} \\ &= 8,047 \text{ lb-NH}_3/\text{year} \end{aligned}$$

608 ft x 50 ft houses (16 houses)

$$\begin{aligned} \text{Annual PE1 PM}_{10} &= 0.02 \text{ lb-PM}_{10}/\text{bird-year} \times 33,000 \text{ birds/house} \times 16 \text{ houses} \\ &= 10,560 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{Annual PE1 VOC} &= 0.016 \text{ lb-VOC/bird-year} \times 33,000 \text{ birds/house} \times 16 \\ &\text{houses} \\ &= 8,448 \text{ lb-VOC/year} \end{aligned}$$

$$\begin{aligned} \text{Annual PE1 NH}_3 &= 0.0958 \text{ lb-NH}_3/\text{bird-year} \times 33,000 \text{ birds/house} \times 16 \\ &\text{houses} \\ &= 50,582 \text{ lb-NH}_3/\text{year} \end{aligned}$$

500 ft x 54 ft houses (20 houses)

Since these are new emission units, PE1 = 0 lb/year for all pollutants.

The total annual PE1 for this permit unit is calculated in the table below as the sum of the PE1 from each type of broiler house.

$$\text{Total PE1} = \text{PE1}_{512 \text{ ft} \times 50 \text{ ft, lb/year}} + \text{PE1}_{608 \text{ ft} \times 50 \text{ ft, lb/year}} + \text{PE1}_{500 \text{ ft} \times 54 \text{ ft, lb/year}}$$

Total Annual PE1, lb/year				
Pollutant	PE1 _{512 ft x 50 ft Houses}	PE1 _{608 ft x 50 ft Houses}	PE1 _{500 ft x 54 ft Houses}	Total PE1 _{All Houses}
PM ₁₀	1,680	10,560	0	12,240
VOC	1,344	8,448	0	9,792
NH ₃	8,047	50,582	0	58,629

Daily PE1

Daily PE1 for each emissions unit is calculated using the following formula:

$$\text{Daily PE1} = \text{Annual PE1, lb/year} \div 365 \text{ day/year} \div \# \text{ Houses of the Type}$$

512 ft x 50 ft houses (3 houses)

$$\begin{aligned} \text{Daily PE1 PM}_{10} &= 1,680 \text{ lb-PM}_{10}/\text{year} \div 365 \text{ day/year} \div 3 \text{ houses} \\ &= 1.5 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE1 VOC} &= 1,344 \text{ lb-VOC}/\text{year} \div 365 \text{ day/year} \div 3 \text{ houses} \\ &= 1.2 \text{ lb-VOC}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE1 NH}_3 &= 8,047 \text{ lb-NH}_3/\text{year} \div 365 \text{ day/year} \div 3 \text{ houses} \\ &= 7.3 \text{ lb-NH}_3/\text{day} \end{aligned}$$

608 ft x 50 ft houses (16 houses)

$$\begin{aligned} \text{Daily PE1 PM}_{10} &= 10,560 \text{ lb-PM}_{10}/\text{year} \div 365 \text{ day/year} \div 16 \text{ houses} \\ &= 1.8 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE1 VOC} &= 8,448 \text{ lb-VOC}/\text{year} \div 365 \text{ day/year} \div 16 \text{ houses} \\ &= 1.4 \text{ lb-VOC}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE1 NH}_3 &= 50,582 \text{ lb-NH}_3/\text{year} \div 365 \text{ day/year} \div 16 \text{ houses} \\ &= 8.7 \text{ lb-NH}_3/\text{day} \end{aligned}$$

500 ft x 54 ft houses (20 houses)

Since these are new emissions units, PE1 = 0 lb/day for all pollutants.

The total daily PE1 for permit unit -1 for each pollutant is calculated in the tables below using the following formula:

$$\text{Total PE1} = \text{PE1}_{\text{Each House, lb/day}} \times \# \text{ Houses}$$

PM₁₀ Daily PE1, lb/day Permit Unit S-7126-1				
Pollutant	House Type Description	Daily PE1, Each House	# of Houses	Total PE1, lb/day
PM ₁₀	512' x 50'	1.5	3	4.5
	608' x 50'	1.8	16	28.8
	500' x 54'	0	0	0.0
Total Daily PE1, lb-PM ₁₀ /day				33.3

VOC Daily PE1, lb/day Permit Unit S-7126-1				
Pollutant	House Type Description	Daily PE1, Each House	# of Houses	Total PE1, lb/day
VOC	512' x 50'	1.2	3	3.6
	608' x 50'	1.4	16	22.4
	500' x 54'	0	0	0.0
Total Daily PE1, lb-VOC/day				26.0

NH₃ Daily PE1, lb/day Permit Unit S-7126-1				
Pollutant	House Type Description	Daily PE1, Each House	# of Houses	Total PE1, lb/day
NH ₃	512' x 50'	7.3	3	21.9
	608' x 50'	8.7	16	139.2
	500' x 54'	0	0	0.0
Total Daily PE1, lb-NH ₃ /day				161.1

Manure Handling: Permit Unit S-7126-2

As stated previously, emissions from handling solid manure/litter are included with the emissions for the broiler houses; therefore, no calculations are necessary.

2. Post Project Potential to Emit (PE2)

Broiler Houses: ATC S-7126-1-4

PE2 calculations for ATC -1-4 only include the existing house types (i.e., not including the proposed new houses) since ATC -1-4 is only to address the increase in the number of birds for the existing facility.

Annual PE2 (ATC -1-4)

Annual PE2 is calculated for each size of broiler house and each pollutant using the following formula:

$$\text{Annual PE2} = \text{EF, lb/bird-year} \times \# \text{ of Birds in a House} \times \# \text{ of Houses of the Type}$$

512 ft x 50 ft houses (3 houses)

$$\begin{aligned} \text{Annual PE2 PM}_{10} &= 0.02 \text{ lb-PM}_{10}/\text{bird-year} \times 32,000 \text{ birds/house} \times 3 \text{ houses} \\ &= 1,920 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2 VOC} &= 0.016 \text{ lb-VOC}/\text{bird-year} \times 32,000 \text{ birds/house} \times 3 \text{ houses} \\ &= 1,536 \text{ lb-VOC}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2 NH}_3 &= 0.0958 \text{ lb-NH}_3/\text{bird-year} \times 32,000 \text{ birds/house} \times 3 \text{ houses} \\ &= 9,197 \text{ lb-NH}_3/\text{year} \end{aligned}$$

608 ft x 50 ft houses (16 houses)

$$\begin{aligned} \text{Annual PE2 PM}_{10} &= 0.02 \text{ lb-PM}_{10}/\text{bird-year} \times 38,000 \text{ birds/house} \times 16 \text{ houses} \\ &= 12,160 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2 VOC} &= 0.016 \text{ lb-VOC}/\text{bird-year} \times 38,000 \text{ birds/house} \times 16 \\ &\text{houses} \\ &= 9,728 \text{ lb-VOC}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2 NH}_3 &= 0.0958 \text{ lb-NH}_3/\text{bird-year} \times 38,000 \text{ birds/house} \times 16 \\ &\text{houses} \\ &= 58,246 \text{ lb-NH}_3/\text{year} \end{aligned}$$

The total annual PE2 for ATC -1-4 is calculated in the table below as the sum of the PE2 from each type of existing broiler house.

$$\text{Total PE2} = \text{PE2}_{512 \text{ ft} \times 50 \text{ ft}}, \text{ lb/year} + \text{PE2}_{608 \text{ ft} \times 50 \text{ ft}}, \text{ lb/year}$$

Total Annual PE2, lb/year ATC -1-4			
Pollutant	PE2 _{512 ft x 50 ft Houses}	PE2 _{608 ft x 50 ft Houses}	Total PE2 _{All Houses}
PM ₁₀	1,920	12,160	14,080
VOC	1,536	9,728	11,264
NH ₃	9,197	58,246	67,443

Daily PE2 (ATC -1-4)

Daily PE2 for each emissions unit is calculated using the following formula:

$$\text{Daily PE2} = \text{Annual PE2, lb/year} \div 365 \text{ day/year} \div \# \text{ Houses of the Type}$$

512 ft x 50 ft houses (3 houses)

$$\begin{aligned} \text{Daily PE2 PM}_{10} &= 1,920 \text{ lb-PM}_{10}/\text{year} \div 365 \text{ day/year} \div 3 \text{ houses} \\ &= 1.8 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE2 VOC} &= 1,536 \text{ lb-VOC/year} \div 365 \text{ day/year} \div 3 \text{ houses} \\ &= 1.4 \text{ lb-VOC/day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE2 NH}_3 &= 9,197 \text{ lb-NH}_3\text{/year} \div 365 \text{ day/year} \div 3 \text{ houses} \\ &= 8.4 \text{ lb-NH}_3\text{/day} \end{aligned}$$

608 ft x 50 ft houses (16 houses)

$$\begin{aligned} \text{Daily PE2 PM}_{10} &= 12,160 \text{ lb-PM}_{10}\text{/year} \div 365 \text{ day/year} \div 16 \text{ houses} \\ &= 2.1 \text{ lb-PM}_{10}\text{/day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE2 VOC} &= 9,728 \text{ lb-VOC/year} \div 365 \text{ day/year} \div 16 \text{ houses} \\ &= 1.7 \text{ lb-VOC/day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE2 NH}_3 &= 58,246 \text{ lb-NH}_3\text{/year} \div 365 \text{ day/year} \div 16 \text{ houses} \\ &= 10.0 \text{ lb-NH}_3\text{/day} \end{aligned}$$

The total daily PE2 for ATC -1-4 for each pollutant is calculated in the tables below using the following formula:

$$\text{Total PE2} = \text{PE2}_{\text{Each House, lb/day}} \times \# \text{ Houses}$$

PM₁₀ Daily PE2, lb/day ATC -1-4				
Pollutant	House Type Description	Daily PE2, Each House	# of Houses	Total PE2, lb/day
PM ₁₀	512' x 50'	1.8	3	5.4
	608' x 50'	2.1	16	33.6
Total Daily PE2, lb-PM ₁₀ /day				39.0

VOC Daily PE2, lb/day ATC -1-4				
Pollutant	House Type Description	Daily PE2, Each House	# of Houses	Total PE2, lb/day
VOC	512' x 50'	1.4	3	4.2
	608' x 50'	1.7	16	27.2
Total Daily PE2, lb-VOC/day				31.4

NH₃ Daily PE2, lb/day ATC -1-4				
Pollutant	House Type Description	Daily PE2, Each House	# of Houses	Total PE2, lb/day
NH ₃	512' x 50'	8.4	3	25.2
	608' x 50'	10.0	16	160.0
Total Daily PE2, lb-NH ₃ /day				185.2

Broiler Houses: ATC S-7126-1-5

Annual PE2 (ATC -1-5)

The annual PE2 for each pollutant is calculated using the facility bird limit and the following formula. Note that individual calculations for each house type (size) are not required for annual PE2 calculations for this ATC since the facility has proposed a bird limit that is lower than the facility's maximum capacity:

$$\text{Annual PE2} = \text{EF, lb/bird-year} \times \# \text{ of Birds}$$

$$\begin{aligned} \text{PM}_{10} \\ \text{Annual PE2} &= 0.02 \text{ lb-PM}_{10}/\text{bird-year} \times 1,140,000 \text{ birds} \\ &= 22,800 \text{ lb-PM}_{10}/\text{year} \end{aligned}$$

$$\begin{aligned} \text{VOC} \\ \text{Annual PE2} &= 0.016 \text{ lb-VOC/bird-year} \times 1,140,000 \text{ birds} \\ &= 18,240 \text{ lb-VOC/year} \end{aligned}$$

$$\begin{aligned} \text{NH}_3 \\ \text{Annual PE2} &= 0.0958 \text{ lb-NH}_3/\text{bird-year} \times 1,140,000 \text{ birds} \\ &= 109,212 \text{ lb-NH}_3/\text{year} \end{aligned}$$

Daily PE2 (ATC -1-5)

The applicant has proposed no changes to the existing houses; therefore, daily PE2 for the existing houses is equal to daily PE2 calculated for ATC -1-4 above. The daily PE2 for each proposed new house is calculated using the following formula:

$$\text{Daily PE2} = \text{EF, lb/bird-year} \times \# \text{ of Birds per House} \div 365 \text{ day/year}$$

500 ft x 54 ft houses (20 houses)

$$\begin{aligned} \text{Daily PE2 PM}_{10} &= 0.02 \text{ lb-PM}_{10}/\text{bird-year} \times 33,750 \text{ birds/house} \div 365 \\ &\text{ day/year} \\ &= 1.8 \text{ lb-PM}_{10}/\text{day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE2 VOC} &= 0.016 \text{ lb-VOC/bird-year} \times 33,750 \text{ birds/house} \div 365 \\ &\text{ day/year} \\ &= 1.5 \text{ lb-VOC/day} \end{aligned}$$

$$\begin{aligned} \text{Daily PE2 NH}_3 &= 0.0958 \text{ lb-NH}_3/\text{bird-year} \times 33,750 \text{ birds/house} \div 365 \\ &\text{ day/year} \\ &= 8.9 \text{ lb-NH}_3/\text{day} \end{aligned}$$

The total daily PE2 for ATC -1-5 for each pollutant is calculated in the tables below using the following formula:

$$\text{Total PE2} = \text{PE2}_{\text{Each House, lb/day}} \times \# \text{ Houses}$$

PM₁₀ Daily PE2, lb/day ATC -1-5				
Pollutant	House Type Description	Daily PE2, Each House	# of Houses	Total PE2, lb/day
PM ₁₀	512' x 50'	1.8	3	5.4
	608' x 50'	2.1	16	33.6
	500' x 54'	1.8	20	36.0
Total Daily PE2, lb-PM ₁₀ /day				75.0

VOC Daily PE2, lb/day ATC -1-5				
Pollutant	House Type Description	Daily PE2, Each House	# of Houses	Total PE2, lb/day
VOC	512' x 50'	1.4	3	4.2
	608' x 50'	1.7	16	27.2
	500' x 54'	1.5	20	30.0
Total Daily PE2, lb-VOC/day				61.4

NH₃ Daily PE2, lb/day ATC -1-5				
Pollutant	House Type Description	Daily PE2, Each House	# of Houses	Total PE2, lb/day
NH ₃	512' x 50'	8.4	3	25.2
	608' x 50'	10.0	16	160.0
	500' x 54'	8.9	20	178.0
Total Daily PE2, lb-NH ₃ /day				363.2

Manure Handling: ATCs S-7126-2-4 and -2-5

As stated previously, emissions from handling solid manure/litter are included with the emissions for the broiler houses; therefore, no calculations are necessary.

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

The PE for S-7126-1 and -2 were calculated above, and the PE for S-7126-4 through -7 were calculated in project C-1153787 and are summarized below:

SSPE1 (lb/year)						
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC	NH ₃
S-7126-1-3	0	0	12,240	0	9,792	58,629
S-7126-2-3	0	0	0	0	0	0
S-7126-4-0	277	0	9	61	15	0
S-7126-5-0	1,179	1	56	359	134	0
S-7126-6-0	783	0	37	238	89	0
S-7126-7-0	298	0	14	90	34	0
SSPE1	2,537	1	12,356	748	10,064	58,629

4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

SSPE2 (lb/year)						
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC	NH ₃
ATC S-7126-1-4*	0*	0*	14,080*	0*	11,264*	67,443*
ATC S-7126-1-5	0	0	22,800	0	18,240	109,212
ATC S-7126-2-4	0	0	0	0	0	0
ATC S-7126-2-5	0	0	0	0	0	0
S-7126-4	277	0	9	61	15	0
S-7126-5	1,179	1	56	359	134	0
S-7126-6	783	0	37	238	89	0
S-7126-7	298	0	14	90	34	0
SSPE2	2,537	1	22,916	748	18,512	109,212

* Since these emissions are less than the emissions authorized under ATC S-7126-1-5, the emissions from ATC S-7126-1-5 will be used for the SSPE2 calculations.

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR Section 51.165

Rule 2201 Major Source Determination (lb/year)						
	NO_x	SO_x	PM₁₀	PM_{2.5}	CO	VOC
SSPE1	2,537	1	12,356	12,356	748	10,064
SSPE2	2,537	1	22,916	22,916	748	18,512
Major Source Threshold	20,000	140,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	No	No

Note: PM_{2.5} assumed to be equal to PM₁₀

As seen in the table above, the facility is not an existing Major Source and is not becoming a Major Source as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21(b)(1)(iii). Therefore, the PSD Major Source threshold is 250 TPY for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO₂	VOC	SO₂	CO	PM	PM₁₀
Estimated Facility PE before Project Increase	1.3	5.0	0.0	0.3	6.2	6.2
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source?	N	N	N	N	N	N

As shown above, the facility is not an existing PSD major source for at least one pollutant.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

As shown in Section VII.C.5 above, the facility is not a Major Source for any pollutant.

Therefore BE = PE1.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is not a major source for any of the pollutants addressed in this project, this project does not constitute an SB 288 major modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR Section 51.165 and part D of Title I of the CAA.

Since this facility is not a Major Source for any pollutants, this project does not constitute a Federal Major Modification.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are: (See 40 CFR Section 52.21(b)(23) definition of significant)

- PM
- PM₁₀

I. Project Emissions Increase - New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new major source subject to PSD requirements.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR Section 52.21(b)(1)(i). The PSD Major Source threshold is 250 TPY for any regulated NSR pollutant.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Total PE from New and Modified Units	0.0	9.1	0.0	0.0	11.4	11.4
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	N	N	N	N	N	N

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix G.

VIII. Compliance Determination

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions⁶:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

a. New emissions units – PE > 2 lb/day

As seen in Section VII.C.2 above, the applicant is proposing to install 20 new broiler houses under ATC S-7126-1-5 with a PE greater than 2 lb/day for NH₃. Therefore, BACT for NH₃ PE > 2 lb/day purposes is triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore, BACT for relocation of emission units purposes is not triggered.

⁶ Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

c. Modification of emissions units – AIPE > 2 lb/day

As discussed in Section I, the applicant is proposing to modify the existing operation with ATC -1-4 to increase the number of birds that are housed in each of the existing house types. AIPE is calculated as follows for the modified broiler houses under ATC -1-4.

$$\text{AIPE} = \text{PE2} - \text{HAPE}$$

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)

PE2 = Post-Project Potential to Emit, (lb/day)

HAPE = Historically Adjusted Potential to Emit, (lb/day)

$$\text{HAPE} = \text{PE1} \times (\text{EF2}/\text{EF1})$$

Where,

PE1 = the emission unit's PE prior to modification or relocation, (lb/day)

EF2 = the emission unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1, then EF2/EF1 shall be set to 1

EF1 = the emission unit's permitted emission factor for the pollutant before the modification or relocation

Thus,

$$\text{AIPE} = \text{PE2} - (\text{PE1} \times (\text{EF2} \div \text{EF1}))$$

Since the EF2 = EF1, AIPE = PE2 – PE1. AIPE is calculated in the following tables for each pollutant:

AIPE – PM ₁₀ , lb/day ATC -1-4				
Unit	PE2	PE1	AIPE	BACT Triggered?
PE2 _{512 ft x 50 ft Houses}	1.8	1.5	0.3	No
PE2 _{608 ft x 50 ft Houses}	2.1	1.8	0.3	No

AIPE – VOC, lb/day ATC -1-4				
Unit	PE2	PE1	AIPE	BACT Triggered?
PE2 _{512 ft x 50 ft Houses}	1.3	1.2	0.1	No
PE2 _{608 ft x 50 ft Houses}	1.6	1.4	0.2	No

AIPE – NH ₃ , lb/day ATC -1-4				
Unit	PE2	PE1	AIPE	BACT Triggered?
PE2 _{512 ft x 50 ft Houses}	8.4	7.3	1.1	No
PE2 _{608 ft x 50 ft Houses}	10.0	8.7	1.3	No

As demonstrated above, the AIPE is not greater than 2.0 lb/day for any pollutant. Therefore, BACT for AIPE > 2 lb/day purposes is not triggered for the existing houses.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 and/or Federal Major Modification. Therefore, BACT for major modification purposes is not triggered.

2. BACT Guideline

BACT Guideline 5.7.1 is included in Appendix C and applies to broiler houses.

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached top-down BACT analysis (see Appendix D), BACT is satisfied with the following:

NH₃: acidifying litter amendments; all birds fed in accordance with NRC guidelines; and all mortality removed from houses twice per day

The following conditions will be included on ATC S-7126-1-5 as a mechanism to enforce compliance with the requirements of BACT:

- Permittee shall use acidifying litter amendments in the 500 ft x 54 ft houses. The amendments shall be applied in accordance with the manufacturer's recommendations. [District Rule 2201]
- Permittee shall feed all animals according to National Research Council (NRC) guidelines. [District Rules 2201 and 4570]
- All mortality in each 500 ft x 54 ft house shall be removed at least twice per day. [District Rule 2201]

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201. Pursuant to Rule 2201, Section 4.69, offsets are not required for agricultural sources, for criteria pollutants for agricultural sources if emissions reductions from that source would not meet the criteria for real, permanent, quantifiable, and enforceable emission reductions. The broiler chicken operation in this project is an agricultural source per the definition in Section 3.5 of Rule 2201; therefore, this exemption is applicable to this project.

However, even when there is an applicable exemption, the SSPE2 values are compared to the offset threshold to determine if offsets are triggered. In its PAS database, the District keeps track of facilities where offsets are triggered but an exemption applies. The SSPE2 values are compared to the offset trigger thresholds in the following table:

Offset Determination (lb/year)					
	NO_x	SO_x	PM₁₀	CO	VOC
SSPE2	2,537	1	22,916	748	17,372
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets Triggered?	No	No	No	No	No

2. Quantity of Offsets Required

As shown in the table above, no offset thresholds are exceeded with this project. Further, as previously stated, the offset exemption from Section 4.6.9 of District Rule 2201 is applicable to this project; therefore, offset calculations are not required.

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed,
- d. Any project with an SSPE2 of greater than 20,000 lb/year for any pollutant, and/or
- e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing for New Major Source purposes is not required for this project.

As demonstrated in Sections VII.C.7 and VII.C.8, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant; therefore, public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Public Notification for Surpassing Offset Thresholds (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE1	2,537	1	12,356	748	10,064
SSPE2	2,537	1	22,916	748	18,512
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Public Notice Required?	No	No	No	No	No

As detailed above, there were no thresholds surpassed with this project; therefore, public noticing for offset purposes is not required.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

Public Notification for SSIPE > 20,000 lb/year						
	NO _x	SO _x	PM ₁₀	CO	VOC	NH ₃
SSPE1 (lb/year)	2,537	1	12,356	748	10,064	58,629
SSPE2 (lb/year)	2,537	1	22,916	748	18,512	109,212
SSIPE (lb/year)	0	0	10,560	0	8,448	50,583
SSIPE Public Notice Threshold	20,000 lb/year					
Public Notice Required?	No	No	No	No	No	Yes

As demonstrated above, the SSIPE for NH₃ is greater than 20,000 lb/year; therefore, public noticing for SSIPE purposes is required.

e. Title V Significant Permit Modification

Since this facility does not have a Title V operating permit, this change is not a Title V Significant Permit Modification; therefore, public noticing for Significant Modification purposes is not required.

2. Public Notice Action

As discussed above, public noticing is required for this project for NH₃ SSIPE > 20,000 lb/year. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

The DELs for the broiler house emission units are based on the bird limits for each house type, the lb/bird-year emission factor for each pollutant, and the maximum operating schedule of 365 days/year. The following conditions will be included on the ATCs, as specified, as a mechanism to enforce compliance.

ATC S-7126-1-4

- Emissions from the broiler chicken operation shall not exceed any of the following limits: 0.02 lb-PM10/bird/year; 0.025 lb-VOC/bird/year; and 0.0958 lb-NH3/bird/year. [District Rule 2201]

- The number of birds housed in each of the three 512 ft x 50 ft broiler houses (located near the northeast corner of the facility) shall not exceed 32,000 birds at any one time. The number of birds housed in each of the remaining sixteen 608 ft x 50 ft broiler houses (eight located at the west side of the facility and eight located at the east side of the facility) shall not exceed 38,000 birds at any one time. [District Rule 2201]

ATC S-7126-1-5

- Emissions from the broiler chicken operation shall not exceed any of the following limits: 0.02 lb-PM10/bird/year; 0.025 lb-VOC/bird/year; and 0.0958 lb-NH3/bird/year. [District Rule 2201]
- The number of birds housed in each of the three 512 ft x 50 ft broiler houses (located near the northeast corner of the facility) shall not exceed 32,000 birds at any one time. The number of birds housed in each of the sixteen 608 ft x 50 ft broiler houses (eight located at the west side of the facility and eight located at the east side of the facility) shall not exceed 38,000 birds at any one time. The number of birds housed in each of the remaining twenty 500 ft x 54 ft broiler houses shall not exceed 33,750 birds at any one time. [District Rule 2201]

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

Monitoring is not required for compliance with Rule 2201. Monitoring requirements in accordance with District Rule 4570 will be discussed in Section VIII, *District Rule 4570*, of this evaluation.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification, and daily emission limit requirements of Rule 2201. The owner/operator will be required to maintain records of the number of birds in each house size (e.g., 608' x 50', etc.) and will be required to maintain records of the total number of birds at the ranch and records that acidifying litter amendments are used as required per BACT (for ATC -1-5). The following conditions will be included on each ATC as shown as a mechanism to enforce compliance:

ATCs -1-4 and -1-5

- {modified 4449} Permittee shall maintain a record of the number of animals of each species and production group in each poultry house and shall maintain quarterly records of any changes to this information. [District Rules 2201 and 4570]

ATC -1-5

- Permittee shall maintain records that acidifying litter amendments are used per the manufacturer's recommendations. [District Rule 2201]
- Permittee shall maintain records of feed content, formulation, and quantity of feed additive utilized, to demonstrate compliance with National Research Council (NRC) guidelines. Records such as feed company guaranteed analyses (feed tags), ration sheets, or feed purchase records may be used to meet this requirement. [District Rules 2201 and 4570]
- Permittee shall maintain daily records of mortality removal in each poultry house. [District Rule 2201]

Additional recordkeeping requirements, in accordance with District Rule 4570, will be discussed in Section VIII, *District Rule 4570*, of this evaluation.

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to Appendix E of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO_x, CO, and SO_x. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO_x, CO, or SO_x.

The proposed location is in a non-attainment area for the state's PM₁₀ as well as federal and state PM_{2.5} thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM₁₀ and PM_{2.5}.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

Since this facility’s potential emissions do not exceed any major source thresholds of Rule 2201, this facility is not a major source, and Rule 2520 does not apply.

Rule 4101 Visible Emissions

District Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity).

Pursuant to Section 4.12, Emissions subject to or specifically exempt from Regulation VIII (Fugitive PM10 Prohibitions) are exempt from this regulation. According to District Rule 8011, Section 4.0 - Exemptions, on-field agricultural sources are exempt from the provisions of Regulation VIII. Therefore, this rule does not apply to the activities conducted solely for the raising of poultry.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Risk Management Review (RMR) Memo for this project (Appendix E), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project. The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
S-7126-1-4 and S-7126-1-5	2.79 per million	Yes

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District’s thresholds for triggering T-BACT

requirements; therefore, compliance with the District's Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e., acute and/or chronic indices greater than 1 and a cancer risk greater than 20 in a million). As outlined by the RMR Summary in Appendix E, the emissions increases for this project were determined to be less than significant.

Per the RMR Summary in Appendix E, there are no special permit conditions required to enforce the assumptions made in these analyses.

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot. Particulate matter concentration from broiler houses is not expected to exceed the applicable limit as demonstrated below. Note that as previously stated in Section VII.A of this document, the PM emission rate is calculated as 250% (1/0.40) of PM₁₀.

$$\text{PM Conc. (gr/scf)} = \frac{(\text{PM emission rate}) \times (7,000 \text{ gr/lb})}{(\text{Air flow rate}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})}$$

Each 512 ft x 50 ft Broiler House

PM emission rate for each house (Assuming PM is 250% of PM₁₀)

$$= 1.8 \text{ lb-PM}_{10}/\text{day} \times 2.5 \text{ lb-PM}/\text{lb-PM}_{10} = 4.5 \text{ lb-PM}/\text{day}$$

Minimum house ventilation rate = 1,830 scfm

$$\text{PM Conc. (gr/scf)} = [(4.5 \text{ lb/day}) \times (7,000 \text{ gr/lb})] \div [(1,830 \text{ ft}^3/\text{min}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})]$$

$$\text{PM Conc.} = 0.012 \text{ gr/scf} < 0.1 \text{ gr/scf}$$

Each 608 ft x 50 ft Broiler House

PM emission rate for each house (Assuming PM is 250% of PM₁₀)

$$= 2.1 \text{ lb-PM}_{10}/\text{day} \times 2.5 \text{ lb-PM}/\text{lb-PM}_{10} = 5.25 \text{ lb-PM}/\text{day}$$

Minimum house ventilation rate = 1,830 scfm

$$\text{PM Conc. (gr/scf)} = [(5.25 \text{ lb/day}) \times (7,000 \text{ gr/lb})] \div [(1,830 \text{ ft}^3/\text{min}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})]$$

$$\text{PM Conc.} = 0.014 \text{ gr/scf} < 0.1 \text{ gr/scf}$$

Each 500 ft x 54 ft Broiler House

PM emission rate for each house (Assuming PM is 250% of PM₁₀)

$$= 1.8 \text{ lb-PM}_{10}/\text{day} \times 2.5 \text{ lb-PM}/\text{lb-PM}_{10} = 4.5 \text{ lb-PM}/\text{day}$$

Minimum house ventilation rate = 1,830 scfm

$$\text{PM Conc. (gr/scf)} = [(4.5 \text{ lb/day}) \times (7,000 \text{ gr/lb})] \div [(1,830 \text{ ft}^3/\text{min}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})]$$

$$\text{PM Conc.} = 0.012 \text{ gr/scf} < 0.1 \text{ gr/scf}$$

As shown above, PM emissions concentrations from the broiler houses are below the applicable limit. Therefore, compliance with the requirements of this rule is expected.

Rule 4550 Conservation Management Practices (CMP)

This rule applies to agricultural operation sites located within the San Joaquin Valley Air Basin. The purpose of this rule is to limit fugitive dust emissions from agricultural operation sites.

Pursuant to Section 4.2, broiler ranches with greater than or equal to 125,000 birds are subject to this rule.

Pursuant to Section 5.1, effective on and after July 1, 2004, an owner/operator shall implement the applicable CMPs selected pursuant to Section 6.2.

Pursuant to Section 5.2, an owner/operator shall prepare and submit a CMP application for each agricultural operation site to the APCO for approval.

The facility has received District approval for its CMP plan. Continued compliance with the requirements of District Rule 4550 is expected.

Rule 4570 Confined Animal Facilities (CAF)

This rule applies to Confined Animal Facilities (CAF) located within the San Joaquin Valley Air Basin. The purpose of this rule is to limit emissions of Volatile Organic Compounds (VOC) from Confined Animal Facilities (CAF).

Section 5.0 Requirements

Pursuant to Section 5.1, owners/operators of any CAF shall submit, for approval by the APCO, a permit application for each Confined Animal Facility.

Pursuant to Section 5.1.2, a thirty-day public noticing and commenting period shall be required for all large CAF's receiving their initial Permit-to-Operate or Authority-to-Construct. This facility previously met the requirement for public notification per this section of the rule (since the facility

was formerly a large turkey CAF); therefore, additional public noticing for large CAFs is not required.

Pursuant to Section 5.1.3, owners/operators shall submit a facility emissions mitigation plan of the Permit-to-Operate application or Authority-to-Construct application. The mitigation plan shall contain the following information:

- a. The name, business address, and phone number of the owners/operators responsible for the preparation and the implementation of the mitigation measures listed in the permit.
- b. The signature of the owners/operators attesting to the accuracy of the information provided and adherence to implementing the activities specified in the mitigation plan at all times and the date that the application was signed.
- c. A list of all mitigation measures shall be chosen from the application portions of Sections 5.5 or 5.6.

This facility has submitted a Rule 4570 mitigation plan for the broiler ranch operation; therefore, compliance with this Section is satisfied.

Pursuant to Section 5.1.4 through 5.1.6, the Permit-to-Operate or Authority-to-Construct application shall include the following information, which is in addition to the facility emission mitigation plan:

- The maximum number of animals at the facility in each production stage (facility capacity).
- Any other information necessary for the District to prepare an emission inventory of all regulated air pollutants emitted from the facility as determined by the APCO.
- The approved mitigation measures from the facility's mitigation plan will be listed on the Permit to Operate or Authority-to-Construct as permit conditions.
- The District shall act upon the Authority to Construct application or Permit to Operate application within six (6) months or receiving a complete application.

This facility is limited by equipment descriptions and permit conditions; therefore, compliance with this Section is satisfied.

Pursuant to Section 5.3, owners/operators of any CAF shall implement all VOC emission mitigation measures, as contained in the permit application, on and after 365 days from the date of issuance of either the Authority-to-Construct or the Permit-to Operate whichever is sooner.

Pursuant to Section 5.4, an owner/operator may temporarily suspend use of mitigation measure(s) provided all of the following requirements are met:

- It is determined by a licensed veterinarian, certified nutritionist, CDFA, or USDA that any mitigation measure being suspended is detrimental to animal health or necessary for the animal to molt, and a signed written copy of this determination shall be retained on-site and made available for inspection upon request.
- The owner/operator notifies the District, within forty-eight (48) hours of the determination that the mitigation measure is being temporarily suspended; the specific health condition requiring

the mitigation measure to be suspended; and the duration that the measure must be suspended for animal health reasons,

- The emission mitigation measure is not suspended for longer than recommended by the licensed veterinarian or certified nutritionist for animal health reasons,
- If such a situation exists, or is expected to exist for longer than thirty (30) days, the owners/operators shall, within that thirty (30) day period, submit a new emission mitigation plan designating a mitigation measure to be implemented in lieu of the mitigation measure that was suspended, and
- The APCO, ARB, and EPA approve the temporary suspension of the mitigation measure for the time period requested by the owner/operator and a signed written copy of this determination shall be retained on site.

The following condition will be included on each permit as a mechanism to enforce compliance.

- {4452} If a licensed veterinarian or a certified nutritionist determines that any VOC mitigation measure will be required to be suspended as a detriment to animal health or necessary for the animal to molt, the owners/operators must notify the District in writing within forty-eight (48) hours of the determination including the duration and the specific health condition requiring the mitigation measure to be suspended. If the situation is expected to exist longer than a thirty-day (30) period, the permittee shall submit a new emission mitigation plan designating a mitigation measure to be implemented in lieu of the suspended mitigation measure. [District Rule 4570]

Section 7.0 Administrative Requirements

Section 7.2 General Records for CAFs Subject to Section 5.0 Requirements:

- Copies of all of the facility's permits
- Copies of all laboratory tests, calculations, logs, records, and other information required to demonstrate compliance with all applicable requirements of this rule, as determined by the APCO, ARB, and EPA.
- Records of the number of animals of each species and production group at the facility on the permit issuance date. Quarterly records of any changes to this information shall also be maintained.

The following condition will be included on each permit as a mechanism to enforce compliance.

- {modified 4449} Permittee shall maintain a record of the number of animals of each species and production group in each poultry house and shall maintain quarterly records of any changes to this information. [District Rules 2201 and 4570]

Specific recordkeeping and monitoring conditions are shown below under the appropriate mitigation measures.

Pursuant to Section 7.9, owners/operators of a CAF subject to the requirements of Section 5.0 shall keep and maintain the required records in Sections 7.1 through 7.8.4, as applicable, for a minimum of five (5) years and the records shall be made available to the APCO and EPA upon

request. Therefore, the following condition will be included on each permit as a mechanism to enforce compliance.

- {modified 4453} Permittee shall keep and maintain all records for a minimum of five (5) years and shall make records available to the APCO and EPA upon request. [District Rules 1070 and 4570]

Section 7.10 requires specific monitoring or source testing conditions for each mitigation measure. These conditions are shown below with each mitigation measure.

The facility has chosen the following Mitigation Measures. All conditions required for compliance with Rule 4570 for the mitigation measures selected by the applicant are shown below. The following conditions will be included on each permit as a mechanism to enforce compliance.

General Conditions

- {3215} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
- {3216} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
- {3658} This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [District Rules 2070 and 2080, and Public Resources Code 21000-21177: California Environmental Quality Act].

Broiler Feed Requirements

Feed according to National Research Council (NRC) guidelines.

- {modified 4454} Permittee shall feed all animals according to National Research Council (NRC) guidelines. [District Rules 2201 and 4570]
- {modified 4455} Permittee shall maintain records of feed content, formulation, and quantity of feed additive utilized, to demonstrate compliance with National Research Council (NRC) guidelines. Records such as feed company guaranteed analyses (feed tags), ration sheets, or feed purchase records may be used to meet this requirement. [District Rules 2201 and 4570]

Broiler Housing Requirements

Use a dry housing cleaning method at all times, except when a wet cleaning method is required for animal health or biosecurity issues

- {3675} Permittee shall use a dry housing cleaning method at all times, except when a wet cleaning method is required for animal health or biosecurity issues. [District Rule 4570]
- {3676} Permittee shall maintain records to demonstrate that a dry housing cleaning method is maintained. For times when a wet cleaning method is required, the reason should be included as part of the records. [District Rule 4570]

Use drinkers that do not drip continuously.

- {4567} Permittee shall use drinkers that do not drip continuously. [District Rule 4570]

Inspect drinkers at least once every seven (7) days and adjust the height, volume, and location of drinkers if necessary.

- {4568} Permittee shall inspect drinkers at least once every seven (7) days and adjust the height, volume, and location of drinkers if necessary. [District Rule 4570]
- {4569} Permittee shall record the date that drinkers are inspected dates adjustments were made to the height, volume, and location of drinkers. [District Rule 4570]

Inspect water pipes and drinkers and repair leaks daily.

- {4570} Permittee shall inspect water pipes and drinkers and repair leaks daily. [District Rule 4570]
- {4571} Permittee shall maintain records indicating that water pipes and drinkers are inspected daily and that any leaks are repaired. [District Rule 4570]

Solid Waste Management Requirements

Remove litter/manure from the facility within seventy-two (72) hours of removal from housing, or within seventy two (72) hours of removal of solid manure from housing, cover litter/manure outside the housing with a weatherproof covering from October through May, except for times when wind events remove the covering, not to exceed twenty-four (24) hours per event.

- {4573} Within seventy two (72) hours of removal of solid manure from housing, permittee shall either 1) remove all litter/manure from the facility, or 2) cover litter/manure outside the housing with a weatherproof covering from October through May, except for times when wind events remove the covering, not to exceed twenty-four (24) hours per event. [District Rule 4570]

- {4574} Permittee shall keep records of dates when litter/manure is removed from the facility; manure hauling invoices may be used to meet this requirement, or permittee shall maintain records to demonstrate that litter/manure piles outside the pens are covered with a weatherproof covering from October through May. [District Rule 4570]
- {4528} If weatherproof covering is used, permittee shall maintain records, such as manufacturer warranties or other documentation, demonstrating that the weatherproof covering over litter/manure are installed, used, and maintained in accordance with manufacturer recommendations and applicable standards listed in NRCS Field Office Technical Guide Code 313 or 367, or any other applicable standard approved by the APCO, ARB, and EPA. [District Rule 4570]

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The County of Tulare (County) is the public agency having principal responsibility for approving the Project. As such, the County served as the Lead Agency for the project. Consistent with CEQA Guidelines §15061(b)(3), a Notice of Exemption was prepared and adopted by the County.

The District is a Responsible Agency for the project because of its discretionary approval power over the project via its Permits Rule (Rule 2010) and New Source Review Rule (Rule 2201), (CEQA Guidelines §15381).

The District's engineering evaluation of the project (this document) demonstrates that compliance with District rules and permit conditions would reduce Stationary Source emissions from the project to levels below the District's thresholds of significance for criteria pollutants.

Thus, the District concludes that through a combination of project design elements and permit conditions, project specific stationary source emissions will be reduced to less than significant levels. The District does not have authority over any of the other project impacts and has, therefore, determined that no additional findings are required (CEQA Guidelines §15096(h)).

Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project's potential for litigation risk, which in turn may be based on a project's potential to generate public concern, its potential for significant impacts, and the project proponent's ability to pay for the costs of litigation without a letter of credit, among other factors.

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATCs S-7126-1-4, -1-5, -2-4, and -2-5 subject to the permit conditions on the attached draft ATCs in Appendix A.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-7126-1-4	3020-01-E	260 hp (electrical motor)	\$451.00
S-7126-1-5	3020-01-F	550 hp (electrical motor)	\$666.00
S-7126-2-4	3020-06	Manure Handling - Miscellaneous	\$116.00
S-7126-2-5	3020-06	Manure Handling - Miscellaneous	\$116.00

Appendixes

- A. Draft ATCs
- B. Current PTOs
- C. BACT Guideline
- D. BACT Analysis
- E. RMR Summary
- F. Southeastern Broiler Gaseous and Particulate Matter Emissions Monitoring (p.70)
- G. Quarterly Net Emissions Change

APPENDIX A
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-7126-1-4

LEGAL OWNER OR OPERATOR: PITMAN FAMILY FARMS
MAILING ADDRESS: 1075 NORTH AVE
SANGER, CA 93657

LOCATION: 8777 & 8631 ROAD 88 & 8688 ROAD 84
PIXLEY, CA

EQUIPMENT DESCRIPTION:

MODIFICATION OF BROILER CHICKEN RANCH CONSISTING OF 612,000 BROILERS; 19 MECHANICALLY VENTILATED POULTRY HOUSES, INCLUDING FANS TOTALING 266 ELECTRIC HP: INCREASE THE BIRD LIMIT FROM 612,000 TO 704,000 BROILERS

CONDITIONS

1. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. {3215} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
3. {3216} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
4. {4452} If a licensed veterinarian or a certified nutritionist determines that any VOC mitigation measure will be required to be suspended as a detriment to animal health or necessary for the animal to molt, the owners/operators must notify the District in writing within forty-eight (48) hours of the determination including the duration and the specific health condition requiring the mitigation measure to be suspended. If the situation is expected to exist longer than a thirty-day (30) period, the owner/operator shall submit a new emission mitigation plan designating a mitigation measure to be implemented in lieu of the suspended mitigation measure. [District Rule 4570]
5. Emissions from the broiler chicken operation shall not exceed any of the following limits: 0.02 lb-PM10/bird/year; 0.025 lb-VOC/bird/year; and 0.0958 lb-NH3/bird/year. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

Arnaud Marjollet, Director of Permit Services

S-7126-1-4 : Jul 12 2017 4:15PM - GILLESB : Joint Inspection NOT Required

6. The number of birds housed in each of the three 512 ft x 50 ft broiler houses (located near the northeast corner of the facility) shall not exceed 32,000 birds at any one time. The number of birds housed in each of the remaining sixteen 608 ft x 50 ft broiler houses (eight located at the west side of the facility and eight located at the east side of the facility) shall not exceed 38,000 birds at any one time. [District Rule 2201]
7. Permittee shall feed all animals according to National Research Council (NRC) guidelines. [District Rule 4570]
8. Permittee shall maintain records of feed content, formulation, and quantity of feed additive utilized, to demonstrate compliance with National Research Council (NRC) guidelines. Records such as feed company guaranteed analyses (feed tags), ration sheets, or feed purchase records may be used to meet this requirement. [District Rule 4570]
9. {3675} Permittee shall use a dry housing cleaning method at all times, except when a wet cleaning method is required for animal health or biosecurity issues. [District Rule 4570]
10. {3676} Permittee shall maintain records to demonstrate that a dry housing cleaning method is maintained. For times when a wet cleaning method is required, the reason should be included as part of the records. [District Rule 4570]
11. {4567} Permittee shall use drinkers that do not drip continuously. [District Rule 4570]
12. {4568} Permittee shall inspect drinkers at least once every seven (7) days and adjust the height, volume, and location of drinkers if necessary. [District Rule 4570]
13. {4569} Permittee shall record the date that drinkers are inspected dates adjustments were made to the height, volume, and location of drinkers. [District Rule 4570]
14. {4570} Permittee shall inspect water pipes and drinkers and repair leaks daily. [District Rule 4570]
15. {4571} Permittee shall maintain records indicating that water pipes and drinkers are inspected daily and that any leaks are repaired. [District Rule 4570]
16. Permittee shall maintain a record of the number of animals of each species and production group in each poultry house and shall maintain quarterly records of any changes to this information. [District Rules 2201 and 4570]
17. Permittee shall keep and maintain all records for a minimum of five (5) years and shall make records available to the APCO and EPA upon request. [District Rules 1070 and 4570]
18. {3658} This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [Public Resources Code 21000-21177: California Environmental Quality Act]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-7126-1-5

LEGAL OWNER OR OPERATOR: PITMAN FAMILY FARMS
MAILING ADDRESS: 1075 NORTH AVE
SANGER, CA 93657

LOCATION: 8777 & 8631 ROAD 88 & 8688 ROAD 84
PIXLEY, CA

EQUIPMENT DESCRIPTION:

MODIFICATION OF BROILER CHICKEN RANCH CONSISTING OF 704,000 BROILERS; 19 MECHANICALLY VENTILATED POULTRY HOUSES, INCLUDING FANS TOTALING 266 ELECTRIC HP; INCREASE THE BIRD LIMIT FROM 704,000 TO 1,140,000 BROILERS AND CONSTRUCT TWENTY NEW BROILER HOUSES WITH THIRTEEN, 1 HP ELECTRIC FANS AND THREE 0.5 HP ELECTRIC FANS EACH

CONDITIONS

1. Authority to Construct (ATC) S-7126-1-4 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201]
2. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. {3215} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
4. {3216} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
5. {4452} If a licensed veterinarian or a certified nutritionist determines that any VOC mitigation measure will be required to be suspended as a detriment to animal health or necessary for the animal to molt, the owners/operators must notify the District in writing within forty-eight (48) hours of the determination including the duration and the specific health condition requiring the mitigation measure to be suspended. If the situation is expected to exist longer than a thirty-day (30) period, the owner/operator shall submit a new emission mitigation plan designating a mitigation measure to be implemented in lieu of the suspended mitigation measure. [District Rule 4570]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

Arnaud Marjollet, Director of Permit Services

S-7126-1-5 : Jul 12 2017 4:15PM -- GILLESB : Joint Inspection NOT Required

6. Emissions from the broiler chicken operation shall not exceed any of the following limits: 0.02 lb-PM10/bird/year; 0.025 lb-VOC/bird/year; and 0.0958 lb-NH3/bird/year. [District Rule 2201]
7. The number of birds housed in each of the three 512 ft x 50 ft broiler houses (located near the northeast corner of the facility) shall not exceed 32,000 birds at any one time. The number of birds housed in each of the sixteen 608 ft x 50 ft broiler houses (eight located at the west side of the facility and eight located at the east side of the facility) shall not exceed 38,000 birds at any one time. The number of birds housed in each of the remaining twenty 500 ft x 54 ft broiler houses shall not exceed 33,750 birds at any one time. [District Rule 2201]
8. Permittee shall feed all animals according to National Research Council (NRC) guidelines. [District Rules 2201 and 4570]
9. Permittee shall maintain records of feed content, formulation, and quantity of feed additive utilized, to demonstrate compliance with National Research Council (NRC) guidelines. Records such as feed company guaranteed analyses (feed tags), ration sheets, or feed purchase records may be used to meet this requirement. [District Rules 2201 and 4570]
10. {3675} Permittee shall use a dry housing cleaning method at all times, except when a wet cleaning method is required for animal health or biosecurity issues. [District Rule 4570]
11. {3676} Permittee shall maintain records to demonstrate that a dry housing cleaning method is maintained. For times when a wet cleaning method is required, the reason should be included as part of the records. [District Rule 4570]
12. {4567} Permittee shall use drinkers that do not drip continuously. [District Rule 4570]
13. {4568} Permittee shall inspect drinkers at least once every seven (7) days and adjust the height, volume, and location of drinkers if necessary. [District Rule 4570]
14. {4569} Permittee shall record the date that drinkers are inspected dates adjustments were made to the height, volume, and location of drinkers. [District Rule 4570]
15. {4570} Permittee shall inspect water pipes and drinkers and repair leaks daily. [District Rule 4570]
16. {4571} Permittee shall maintain records indicating that water pipes and drinkers are inspected daily and that any leaks are repaired. [District Rule 4570]
17. Permittee shall use acidifying litter amendments in the 500 ft. x 54 ft. houses. The amendments shall be applied in accordance with the manufacturer's recommendations. [District Rule 2201]
18. Permittee shall maintain records that acidifying litter amendments are used per the manufacturer's recommendations. [District Rule 2201]
19. All mortality in each 500 ft. x 54 ft. house shall be removed at least twice per day. [District Rule 2201]
20. Permittee shall maintain daily records of mortality removal in each broiler house. [District Rule 2201]
21. Permittee shall maintain a record of the number of animals of each species and production group in each poultry house and shall maintain quarterly records of any changes to this information. [District Rules 2201 and 4570]
22. Permittee shall keep and maintain all records for a minimum of five (5) years and shall make records available to the APCO and EPA upon request. [District Rules 1070 and 4570]
23. {3658} This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [Public Resources Code 21000-21177: California Environmental Quality Act]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-7126-2-4

LEGAL OWNER OR OPERATOR: PITMAN FAMILY FARMS
MAILING ADDRESS: 1075 NORTH AVE
SANGER, CA 93657

LOCATION: 8777 & 8631 ROAD 88 & 8688 ROAD 84
PIXLEY, CA

EQUIPMENT DESCRIPTION:

MODIFICATION OF SOLID MANURE HANDLING SYSTEM CONSISTING OF OPEN LITTER STOCK PILES WITH LITTER HAULED OFFSITE: ALLOW AN INCREASE IN THE MANURE THROUGHPUT DUE TO AN INCREASE IN THE BROILER LIMIT FROM 612,000 TO 704,000

CONDITIONS

1. {3215} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
2. {3216} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
3. {4452} If a licensed veterinarian or a certified nutritionist determines that any VOC mitigation measure will be required to be suspended as a detriment to animal health or necessary for the animal to molt, the owners/operators must notify the District in writing within forty-eight (48) hours of the determination including the duration and the specific health condition requiring the mitigation measure to be suspended. If the situation is expected to exist longer than a thirty-day (30) period, the owner/operator shall submit a new emission mitigation plan designating a mitigation measure to be implemented in lieu of the suspended mitigation measure. [District Rule 4570]
4. {4573} Within seventy two (72) hours of removal of solid manure from housing, permittee shall either 1) remove all litter/manure from the facility, or 2) cover litter/manure outside the housing with a weatherproof covering from October through May, except for times when wind events remove the covering, not to exceed twenty-four (24) hours per event. [District Rule 4570]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

S-7126-2-4 : Jul 12 2017 4:15PM -- GILLESR : Joint Inspection NOT Required

5. {4574} Permittee shall keep records of dates when litter/manure is removed from the facility; manure hauling invoices may be used to meet this requirement, or permittee shall maintain records to demonstrate that litter/manure piles outside the pens are covered with a weatherproof covering from October through May. [District Rule 4570]
6. {4528} If weatherproof coverings are used, permittee shall maintain records, such as manufacturer warranties or other documentation, demonstrating that the weatherproof covering over dry manure are installed, used, and maintained in accordance with manufacturer recommendations and applicable standards listed in NRCS Field Office Technical Guide Code 313 or 367, or any other applicable standard approved by the APCO, ARB, and EPA. [District Rule 4570]
7. Permittee shall maintain a record of the number of animals of each species and production group at the facility and shall maintain quarterly records of any changes to this information. [District Rules 2201 and 4570]
8. Permittee shall keep and maintain all records for a minimum of five (5) years and shall make records available to the APCO and EPA upon request. [District Rules 1070 and 4570]
9. {3658} This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [Public Resources Code 21000-21177: California Environmental Quality Act]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-7126-2-5

LEGAL OWNER OR OPERATOR: PITMAN FAMILY FARMS
MAILING ADDRESS: 1075 NORTH AVE
SANGER, CA 93657

LOCATION: 8777 & 8631 ROAD 88 & 8688 ROAD 84
PIXLEY, CA

EQUIPMENT DESCRIPTION:

MODIFICATION OF SOLID MANURE HANDLING SYSTEM CONSISTING OF OPEN LITTER STOCK PILES WITH LITTER HAULED OFFSITE: ALLOW AN INCREASE IN THE MANURE THROUGHPUT DUE TO AN INCREASE IN THE BROILER LIMIT FROM 704,000 TO 1,140,000

CONDITIONS

1. {3215} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
2. {3216} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
3. {4452} If a licensed veterinarian or a certified nutritionist determines that any VOC mitigation measure will be required to be suspended as a detriment to animal health or necessary for the animal to molt, the owners/operators must notify the District in writing within forty-eight (48) hours of the determination including the duration and the specific health condition requiring the mitigation measure to be suspended. If the situation is expected to exist longer than a thirty-day (30) period, the owner/operator shall submit a new emission mitigation plan designating a mitigation measure to be implemented in lieu of the suspended mitigation measure. [District Rule 4570]
4. {4573} Within seventy two (72) hours of removal of solid manure from housing, permittee shall either 1) remove all litter/manure from the facility, or 2) cover litter/manure outside the housing with a weatherproof covering from October through May, except for times when wind events remove the covering, not to exceed twenty-four (24) hours per event. [District Rule 4570]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

S-7126-2-5 : Jul 12 2017 4:15PM - GILLESR : Joint Inspection NOT Required

5. {4574} Permittee shall keep records of dates when litter/manure is removed from the facility; manure hauling invoices may be used to meet this requirement, or permittee shall maintain records to demonstrate that litter/manure piles outside the pens are covered with a weatherproof covering from October through May. [District Rule 4570]
6. {4528} If weatherproof coverings are used, permittee shall maintain records, such as manufacturer warranties or other documentation, demonstrating that the weatherproof covering over dry manure are installed, used, and maintained in accordance with manufacturer recommendations and applicable standards listed in NRCS Field Office Technical Guide Code 313 or 367, or any other applicable standard approved by the APCO, ARB, and EPA. [District Rule 4570]
7. Permittee shall maintain a record of the number of animals of each species and production group at the facility and shall maintain quarterly records of any changes to this information. [District Rules 2201 and 4570]
8. Permittee shall keep and maintain all records for a minimum of five (5) years and shall make records available to the APCO and EPA upon request. [District Rules 1070 and 4570]
9. {3658} This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [Public Resources Code 21000-21177: California Environmental Quality Act]

DRAFT

APPENDIX B
Current PTOs

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-7126-1-3

EXPIRATION DATE: 06/30/2019

EQUIPMENT DESCRIPTION:

BROILER CHICKEN RANCH CONSISTING OF 612,000 BROILERS; 19 MECHANICALLY VENTILATED POULTRY HOUSES, INCLUDING FANS TOTALING 266 ELECTRIC HP

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
3. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
4. If a licensed veterinarian or a certified nutritionist determines that any VOC mitigation measure will be required to be suspended as a detriment to animal health or necessary for the animal to molt, the owners/operators must notify the District in writing within forty-eight (48) hours of the determination including the duration and the specific health condition requiring the mitigation measure to be suspended. If the situation is expected to exist longer than a thirty-day (30) period, the owner/operator shall submit a new emission mitigation plan designating a mitigation measure to be implemented in lieu of the suspended mitigation measure. [District Rule 4570]
5. The number of birds housed in each of the three 512 ft. x 50 ft. broiler barns located near the northeast corner of the facility shall not exceed 28,000 birds at any one time. The number of birds housed in each of the remaining sixteen 606 ft. x 50 ft. broiler barns shall not exceed 33,000 birds at any one time. [District Rule 2201]
6. Permittee shall feed all animals according to National Research Council (NRC) guidelines. [District Rule 4570]
7. Permittee shall maintain records of feed content, formulation, and quantity of feed additive utilized, to demonstrate compliance with National Research Council (NRC) guidelines. Records such as feed company guaranteed analyses (feed tags), ration sheets, or feed purchase records may be used to meet this requirement. [District Rule 4570]
8. Permittee shall use a dry housing cleaning method at all times, except when a wet cleaning method is required for animal health or biosecurity issues. [District Rule 4570]
9. Permittee shall maintain records to demonstrate that a dry housing cleaning method is maintained. For times when a wet cleaning method is required, the reason should be included as part of the records. [District Rule 4570]
10. Permittee shall use drinkers that do not drip continuously. [District Rule 4570]
11. Permittee shall inspect drinkers at least once every seven (7) days and adjust the height, volume, and location of drinkers if necessary. [District Rule 4570]
12. Permittee shall record the date that drinkers are inspected dates adjustments were made to the height, volume, and location of drinkers. [District Rule 4570]
13. Permittee shall inspect water pipes and drinkers and repair leaks daily. [District Rule 4570]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

14. Permittee shall maintain records indicating that water pipes and drinkers are inspected daily and that any leaks are repaired. [District Rule 4570]
15. Permittee shall maintain a record of the number of animals of each species and production group at the facility and shall maintain quarterly records of any changes to this information. [District Rule 4570]
16. Permittee shall keep and maintain all records for a minimum of five (5) years and shall make records available to the APCO and EPA upon request. [District Rule 4570]
17. This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [Public Resources Code 21000-21177: California Environmental Quality Act]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-7126-2-3

EXPIRATION DATE: 06/30/2019

EQUIPMENT DESCRIPTION:

SOLID MANURE HANDLING SYSTEM CONSISTING OF OPEN LITTER STOCK PILES WITH LITTER HAULED OFFSITE

PERMIT UNIT REQUIREMENTS

1. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 1070]
2. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 1070]
3. If a licensed veterinarian or a certified nutritionist determines that any VOC mitigation measure will be required to be suspended as a detriment to animal health or necessary for the animal to molt, the owners/operators must notify the District in writing within forty-eight (48) hours of the determination including the duration and the specific health condition requiring the mitigation measure to be suspended. If the situation is expected to exist longer than a thirty-day (30) period, the owner/operator shall submit a new emission mitigation plan designating a mitigation measure to be implemented in lieu of the suspended mitigation measure. [District Rule 4570]
4. Within seventy two (72) hours of removal of solid manure from housing, permittee shall either 1) remove all litter/manure from the facility, or 2) cover litter/manure outside the housing with a weatherproof covering from October through May, except for times when wind events remove the covering, not to exceed twenty-four (24) hours per event. [District Rule 4570]
5. Permittee shall keep records of dates when litter/manure is removed from the facility; manure hauling invoices may be used to meet this requirement, or permittee shall maintain records to demonstrate that litter/manure piles outside the pens are covered with a weatherproof covering from October through May. [District Rule 4570]
6. If weatherproof coverings are used, permittee shall maintain records, such as manufacturer warranties or other documentation, demonstrating that the weatherproof covering over dry manure are installed, used, and maintained in accordance with manufacturer recommendations and applicable standards listed in NRCS Field Office Technical Guide Code 313 or 367, or any other applicable standard approved by the APCO, ARB, and EPA. [District Rule 4570]
7. Permittee shall maintain a record of the number of animals of each species and production group at the facility and shall maintain quarterly records of any changes to this information. [District Rule 4570]
8. Permittee shall keep and maintain all records for a minimum of five (5) years and shall make records available to the APCO and EPA upon request. [District Rule 4570]
9. This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [Public Resources Code 21000-21177: California Environmental Quality Act]

These terms and conditions are part of the Facility-wide Permit to Operate.

APPENDIX C
BACT Guideline

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 5.7.1*

Last Update: 02/01/2006

Broiler House

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	<p>19% control</p> <p>1) completely enclosed mechanical ventilated broiler housing with evaporative cooling pads, mixing fans, and a computer control system using thermostats, sensors, and timers to control environmental conditions; all birds fed in accordance with NRC or other District-approved guidelines; houses completely cleaned out at least twice per year; and all mortality removed from houses twice per day</p> <p>OR</p> <p>2) acidifying litter amendments; all birds fed in accordance with NRC or other District-approved guidelines; and all mortality removed from houses twice per day</p>	<p>1) 98% control (capture and thermal incineration)</p> <p>2) 95% control (capture and catalytic incineration)</p> <p>3) 95% control (capture and carbon adsorption)</p> <p>4) 80% control (capture and biofiltration)</p>	

APPENDIX D
BACT Analysis

Top Down BACT Analysis for NH3 from Each New Barn

Step 1 - Identify All Possible Control Technologies

The SJVUAPCD BACT Clearinghouse guideline 5.7.1 identifies achieved in practice BACT for broiler houses as follows:

- A. 55% control 1) completely enclosed mechanical ventilated broiler housing with evaporative cooling pads, mixing fans, and a computer control system using thermostats, sensors, and timers to control environmental conditions; all birds fed in accordance with NRC or other District-approved guidelines; houses completely cleaned out at least twice per year; and all mortality removed from houses twice per day OR 2) acidifying litter amendments; all birds fed in accordance with NRC or other District-approved guidelines; and all mortality removed from houses twice per day

The SJVUAPCD BACT Clearinghouse guideline 5.7.1 identifies technologically feasible BACT for distilled spirits storage tanks as follows:

- B. 80% control (capture and biofiltration)

Step 2 - Eliminate Technologically Infeasible Options

The facility raises “free-range” broilers: “free-range” indicates a method of raising broilers where the birds have an opportunity, for at least a portion of the day to, to roam outside. In order allow the birds to have the opportunity to roam outside, the barns necessarily have to have an opening to allow the birds to ingress and egress; therefore, it is not possible to completely enclose the barn. As such, the technologically feasible option (Option B) and the first achieved in practice option (first choice under Option A) from the possible control technologies list in Step 1 above are technologically infeasible and will be removed from further consideration.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

The only remaining option is the second choice of Option A identified in Step 1 above: acidifying litter amendments; all birds fed in accordance with NRC or other District-approved guidelines; and all mortality removed from houses twice per day.

Step 4 - Cost Effectiveness Analysis

Since the applicant is proposing the only remaining control technology, no cost effectiveness analysis is required.

Step 5 - Select BACT

Since the applicant is proposing the only remaining control technology of acidifying litter amendments with all birds fed in accordance with NRC guidelines and all mortality removed from houses twice per day, BACT has been satisfied. These BACT requirements will be placed on the ATCs as enforceable conditions.

APPENDIX E
RMR Summary

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Jesse Garcia/Robert Gilles – Permit Services
 From: Cheryl Lawler – Technical Services
 Date: June 6, 2017
 Facility Name: Pittman Family Farms
 Location: 8777 Road 88 & 8688 Road 84, Pixley
 Application #(s): S-7126-1-4 & 1-5, 2-5
 Project #: S-1163782

A. RMR SUMMARY

RMR Summary						
Units	Prioritization Score	Acute Hazard Index	Chronic Hazard Index	Maximum Individual Cancer Risk	T-BACT Required?	Special Permit Requirements?
Units 1-4 & 1-5 (Poultry Barns)	33.8	0.43	0.12	2.79E-06	See Conclusion ¹	No
Project Totals	33.8	0.43	0.12	2.79E-06		
Facility Totals	>1	0.43	0.12	2.79E-06		

¹T-BACT is determined on a poultry house by poultry house basis. T-BACT will be addressed in the Conclusion Section of this report.

B. RMR REPORT

I. Project Description

Technical Services received a request on April 18, 2017, to perform a Risk Management Review (RMR) and an Ambient Air Quality Analysis (AAQA) for the modification of an existing broiler chicken operation to increase their bird limit in existing poultry barns, and to install 20 new poultry barns.

II. Analysis

Toxic emissions from the new poultry barns were calculated using VOC emission factors generated from a 2004 Source Test conducted on a Broiler House in the District, and PM emission factors generated from using the worst case composite of the 1997 EPA speciation of Kern County feedlot soil. A variable emissions rate for PM10 emissions was set for the poultry barn emission sources. A variable emissions rate allows for specific emission rates for individual groups of sources. In the case of the barns for this facility, a variable emissions rate was used to model the fans which operate dependent on environmental temperature. The modeled variable emission rates can be found in Section IV, Appendix C.

All emission rates were then input into the San Joaquin Valley APCD's Hazard Assessment and Reporting Program (SHARP). In accordance with the District's Risk Management Policy for Permitting New and Modified Sources (APR 1905, May 28, 2015), risks from the project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines. The prioritization score for this facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined health risk assessment was required. The AERMOD model was used, with the parameters outlined below and meteorological data for 2007-2011 from Tipton to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the SHARP Program, which then used the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Analysis Parameters			
Unit 1-4 (Barns 1 thru 3 - Each Poultry Barn)			
Source Type	Line Volume	Location Type	Rural
Approximate Length of each Line Volume (m)	11	Increased Bird Capacity	4,000 Chickens
Building Height (m)	4.27	Increase PM10 Emission Rates (lbs)	0.00913 hr 80 yr
Plume Width (m)	1.37	Increased Ammonia Emission Rate (lbs)	1.1 day

Analysis Parameters			
Unit 1-4 (Barns 4 thru 19 - Each Poultry Barn)			
Source Type	Line Volume	Location Type	Rural
Approximate Length of each Line Volume (m)	40	Increased Bird Capacity	5,000 Chickens
Building Height (m)	4.27	Increase PM10 Emission Rates (lbs)	0.0114 hr 100 yr
Plume Width (m)	1.37	Increased Ammonia Emission Rate (lbs)	1.3 day

Analysis Parameters			
Unit 1-5 (Barns 20 thru 39 - Each Poultry Barn)			
Source Type	Line Volume	Location Type	Rural
Approximate Length of each Line Volume (m)	39	Increased Bird Capacity	33,750 Chickens
Building Height (m)	4.88	Increase PM10 Emission Rates (lbs)	0.0498 hr 436 yr
Plume Width (m)	1.37	Increased Ammonia Emission Rate (lbs)	8.9 day

AAQA. In addition to the RMR, Technical Services performed modeling for the criteria pollutant PM₁₀ using AERMOD. The emission rate used was 616 lbs PM₁₀/year. The results from the Criteria Pollutant Modeling are as follows:

PM₁₀ Pollutant Modeling Results*
Values are in µg/m³

Category	24 Hours	Annual
Net Value	8.79	0.919
Interim Significance Level	10.4 ¹	2.08 ¹
Result	Pass	Pass

¹The District has decided on an interim basis to use a SIL threshold for fugitive dust sources of 10.4 µg/m³ for the 24-hour average concentration and 2.08 µg/m³ for the annual concentration.

III. Conclusion

For all poultry barns (existing & new), the Acute and Chronic Indices are below 1.0, and the Cancer Risk factor associated with each poultry barn is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

The ambient air quality impacts from PM₁₀ emissions at the modified poultry ranch does not exceed the District's 24-hour or Annual interim threshold for fugitive dust sources.

IV. Attachments

- A. RMR Request Form & Attachments
- B. Project Related Emails
- C. Fans Variable Emission Rates
- D. Emissions Speciation Worksheets
- E. Prioritization
- F. Risk Results
- G. Facility Summary
- H. AAQA Results

APPENDIX F
Southeastern Broiler Gaseous and Particulate Matter Emissions Monitoring
(p.70)

Table 16. Multiple regression analysis of PM_{2.5} for bird age, interior temperature, RH, ventilation rate (VR), and litter status (LS) (R²=0.92)

$$\sqrt[3]{PM_{2.5} ER} = \beta_0 + \beta_1 \times \text{Age} + \beta_2 \times \text{Age}^2 + \beta_3 \times T_i + \beta_4 \times \text{RH}_i + \beta_5 \times \text{VR} + \beta_6 \times \text{LS}$$

Term	Estimate	S.E	Prob> t
β_0 = Intercept	0.158	0.010	<.0001
β_1 = Bird age, d	0.012	0.000	<.0001
β_2 = Bird age ² , d ²	N/S		
β_3 = Inside Temp., °F	N/S		
β_4 = Inside RH, %	N/S		
β_5 = VR, cfm/bird	0.039	0.003	<.0001
β_6 = LS, 0 or 1	0.034	0.009	0.0001

Annual PM_{2.5} Emission

The annual PM_{2.5} emission from each house is the accumulation of daily ERs over 365 days. When 5.4 flocks were grown to 52 days of age and the average flock cumulative ER is 12.8 lb/flock (5.8 kg/flock), the annual emission (\pm S.E.) was 71.7 \pm 4.4 lb/yr-house (32.5 \pm 2.0 kg/yr-house). On the basis of number of birds marketed the annual average PM_{2.5} emission (\pm S.E.) was 0.55 \pm 0.04 lb/1,000 birds marketed or 0.25 \pm 0.01 g/bird-marketed.

Relationship among TSP, PM₁₀, and PM_{2.5}

The ratios of PM_{2.5}/PM₁₀, PM_{2.5}/TSP, and PM₁₀/TSP were calculated from daily ERs of TSP, PM₁₀, and PM_{2.5}. All three ratios had similar pattern with bird age or growth (Figures 60, 61, and 62). PM_{2.5}/PM₁₀ ratio rapidly dropped from ~0.17 to ~0.06 during the first 17-d period, then the ratio increased to ~0.12 at the end of the 52-d growth period. PM_{2.5}/TSP and PM₁₀/TSP ratios had similar trends, with the ratio decreasing during the first 12 d and increasing afterwards. The overall average ratios from the two broiler houses were 0.038, 0.093, and 0.40 for PM_{2.5}/TSP, PM_{2.5}/PM₁₀, and PM₁₀/TSP, respectively. Fine particulates are thus a small fraction of TSP.

APPENDIX G
Quarterly Net Emissions Change

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.1 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated in the tables below using following formulas:

$$PE2_{\text{quarterly}} = PE2_{\text{annual}} \div 4 \text{ quarters/year}$$

$$PE1_{\text{quarterly}} = PE1_{\text{annual}} \div 4 \text{ quarters/year}$$

Quarterly NEC [QNEC] for ATC -1-4			
Pollutant	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	0	0	0
SO _x	0	0	0
PM ₁₀	3,520	3,060	460
CO	0	0	0
VOC	2,816	2,448	368

Quarterly NEC [QNEC] for ATC -1-5			
Pollutant	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	0	0	0
SO _x	0	0	0
PM ₁₀	5,700	3,520	2,180
CO	0	0	0
VOC	4,560	2,816	1,744

Quarterly NEC [QNEC] for ATC -2-4 and -2-5			
Pollutant	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	0	0	0
SO _x	0	0	0
PM ₁₀	0	0	0
CO	0	0	0
VOC	0	0	0