MANURE ANALYSIS REPORT

<table>
<thead>
<tr>
<th>LAB NO.</th>
<th>SAMPLE I.D.</th>
<th>UNIT</th>
<th>Total N</th>
<th>P2O5</th>
<th>K2O</th>
<th>Total S</th>
<th>NH4-N</th>
<th>Zn</th>
<th>Mn</th>
<th>Cu</th>
<th>pH</th>
<th>Soluble</th>
<th>Salts</th>
<th>Moisture</th>
<th>Solids</th>
</tr>
</thead>
</table>

RCW42.56.610...Certain information from dairies and feedlots limited to number of animals, volume of live stock, nutrients generated, number of acres covered
**COMPLIANCE MONITORING REPORT**

**DATE RECEIVED**: 8/28/2015

**CATEGORY**
- √ Partial Compliance Evaluation
- Full Compliance Evaluation
- Investigation
- Other 2015 AQMP Submittal

**TYPE**
- Site Inspection
- Stack Test Observation
- Compliance Certification Evaluation
- Reporting Requirement Evaluation
- File Review
- Other

**FACILITY NAME**: Smeenk Brothers Dairy LLC & # 2  
**PERMIT #**:  
**AFS #**:  

**FACILITY LOCATION**: 451 Wendell Phillips Road, Sunnyside, WA 98944  

**FACILITY MAILING ADDRESS**: 451 Wendell Phillips Road, Sunnyside, WA 98944  

**FACILITY CONTACT PERSON**: Scott Smeenk  
**PHONE**: (509) 728-4432  

**APPLICABLE REQUIREMENTS**: N/A  

**FINDINGS**: N/A  

**RECOMMENDATIONS**: N/A  

**PREVIOUS SIMILAR NONCOMPLIANCE**? (Yes/No, Explain) N/A  

<table>
<thead>
<tr>
<th>EVALUATORS</th>
<th>NAME (PLEASE SIGN)</th>
<th>DATE</th>
<th>ACTIVITY</th>
<th>ROUTED TO</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Keith Hurley</td>
<td>8/28/2015</td>
<td>Reviewed and routed to Engineering for review</td>
<td>Engineering</td>
<td></td>
</tr>
</tbody>
</table>
## AQMP for Dairy Operations Pilot Project

### BMP Inspection Checklist

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier Level</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Nutrition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Reduce the amount of dietary protein (N) in the ration to match, rather than exceed, the animal’s needs.</td>
<td>NH₃, N₂O, Odor</td>
<td>1</td>
<td>Records</td>
<td>Spr, Sum</td>
<td>Fall, Wint</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Increase the level of starch in the diet.</td>
<td>CH₄</td>
<td>3</td>
<td>Records</td>
<td>Spr, Sum</td>
<td>Fall, Wint</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Properly manage and minimize overfeeding sulfur in the diet.</td>
<td>H₂S, Odor</td>
<td>1</td>
<td>Records</td>
<td>Spr, Sum</td>
<td>Fall, Wint</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Practice phase-feeding.</td>
<td>NH₃</td>
<td>2</td>
<td>Records</td>
<td>Spr, Sum</td>
<td>Fall, Wint</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>II. Feed Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Properly cover and manage ensiled feedstuffs.</td>
<td>VOC, Odor</td>
<td>2</td>
<td>Records</td>
<td>Spr, Sum</td>
<td>Fall, Wint</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Store feed in a weatherproof storage structure.</td>
<td>VOC, Odor, PM</td>
<td>3</td>
<td>Records</td>
<td>Spr, Sum</td>
<td>Fall, Wint</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Remove spilled and unused feed from feeding areas on a regular basis.</td>
<td>VOC, Odor, PM</td>
<td>1</td>
<td>Records</td>
<td>Spr, Sum</td>
<td>Fall, Wint</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Do not mix feed during windy times.</td>
<td>PM</td>
<td>2</td>
<td>Records</td>
<td>Spr, Sum</td>
<td>Fall, Wint</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMP #</td>
<td>Best Management Practice</td>
<td>Emissions Impacted</td>
<td>Tier</td>
<td>Level of Implementation (0= None, 5= Full)</td>
<td>Verification Method</td>
<td>Applicable Seasons</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------</td>
<td>--------------------</td>
<td>------</td>
<td>------------------------------------------</td>
<td>---------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>III.</td>
<td>Housing - Freestall Barns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ensure proper ventilation.</td>
<td>NH₃, Odor, PM</td>
<td>1</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Bedding selection and management.</td>
<td>NH₃, H₂S, Odor</td>
<td>2</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Treat recycled lagoon water used for flushing.</td>
<td>NH₃, Odor</td>
<td>3</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Remove manure from barns frequently.</td>
<td>NH₃, VOC, Odor</td>
<td>1</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Modify alleyway floors.</td>
<td>NH₃, VOC, Odor</td>
<td>3</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.</td>
<td>Housing - Drylot Pens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Provide shade for cattle.</td>
<td>NH₃, PM</td>
<td>3</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Locate feed and water opposite in pens.</td>
<td>NH₃, PM</td>
<td>3</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Remove and spread (harrow) manure frequently.</td>
<td>NH₃, PM</td>
<td>1</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Use straw bedding in drylot pens.</td>
<td>NH₃, PM, Odor</td>
<td>2</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Incorporate wood chips in surface layer.</td>
<td>NH₃, PM, Odor</td>
<td>2</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Use urease inhibitors.</td>
<td>NH₃, PM, Odor</td>
<td>3</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Surface moisture content management.</td>
<td>NH₃, N₂O, VOC, CH₄, H₂S, PM, Odor</td>
<td>1</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Knock down and remove fence line manure.</td>
<td>VOC, Odor</td>
<td>2</td>
<td></td>
<td>Records Visual</td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:

BMP # Best Management Practice Emissions Impacted Tier Level of Implementation (0= None, 5= Full) Verification Method Applicable Seasons
<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>V.</td>
<td>Grazing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Stock appropriate number of animals.</td>
<td>NH&lt;sub&gt;3&lt;/sub&gt;, N&lt;sub&gt;2&lt;/sub&gt;O</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Use rotational grazing.</td>
<td>NH&lt;sub&gt;3&lt;/sub&gt;, N&lt;sub&gt;2&lt;/sub&gt;O</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Move water and feeding areas frequently.</td>
<td>NH&lt;sub&gt;3&lt;/sub&gt;</td>
<td>2</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Irrigate immediately after grazing.</td>
<td>NH&lt;sub&gt;3&lt;/sub&gt;</td>
<td>3</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.</td>
<td>Manure Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Manure solids separation</td>
<td>NH&lt;sub&gt;3&lt;/sub&gt;, VOC, CH&lt;sub&gt;4&lt;/sub&gt;, H&lt;sub&gt;2&lt;/sub&gt;S, Odor</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lagoon or storage covers</td>
<td>NH&lt;sub&gt;3&lt;/sub&gt;, VOC, CH&lt;sub&gt;4&lt;/sub&gt;, H&lt;sub&gt;2&lt;/sub&gt;S, Odor</td>
<td>2</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Scrub exhaust of enclosed waste containers.</td>
<td>CH&lt;sub&gt;4&lt;/sub&gt;, H&lt;sub&gt;2&lt;/sub&gt;S, Odor</td>
<td>2</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Installation of an anaerobic digester.</td>
<td>CH&lt;sub&gt;4&lt;/sub&gt;</td>
<td>3</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Surface aeration of lagoons.</td>
<td>NH&lt;sub&gt;3&lt;/sub&gt;, VOC, H&lt;sub&gt;2&lt;/sub&gt;S</td>
<td>3</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Reduce the pH of lagoons and manure piles.</td>
<td>NH&lt;sub&gt;3&lt;/sub&gt;, CH&lt;sub&gt;4&lt;/sub&gt;</td>
<td>3</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Encourage purple sulfur bacterial formation in anaerobic lagoons.</td>
<td>H&lt;sub&gt;2&lt;/sub&gt;S, Odor</td>
<td>3</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Properly manage composted solid manure.</td>
<td>CH&lt;sub&gt;4&lt;/sub&gt;, H&lt;sub&gt;2&lt;/sub&gt;S, Odor, PM</td>
<td>1</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Properly manage stockpiled manure.</td>
<td>H&lt;sub&gt;2&lt;/sub&gt;S, Odor, PM</td>
<td>1</td>
<td>Records</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMP #</td>
<td>Best Management Practice</td>
<td>Emissions Impacted</td>
<td>Tier Level</td>
<td>Level of Implementation (0=None, 5=Full)</td>
<td>Verification Method</td>
<td>Applicable Seasons</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>------------</td>
<td>------------------------------------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1</td>
<td>Apply N fertilizer below no-till residue.</td>
<td>NH3, PM</td>
<td>2</td>
<td>Records Visual</td>
<td>Spr Summer</td>
<td>Fall Winter</td>
</tr>
<tr>
<td>2</td>
<td>Inject or incorporate fertilizer into soil within 24 hours of application.</td>
<td>NH3, Odor</td>
<td>1</td>
<td>Records Visual</td>
<td>Spr Summer</td>
<td>Fall Winter</td>
</tr>
<tr>
<td>3</td>
<td>Apply nutrients according to agronomic recommendations based on soil test results.</td>
<td>NH3, N2O</td>
<td>1</td>
<td>Records Visual</td>
<td>Spr Summer</td>
<td>Fall Winter</td>
</tr>
<tr>
<td>4</td>
<td>Do not over-irrigate.</td>
<td>NH3, N2O</td>
<td>1</td>
<td>Records Visual</td>
<td>Spr Summer</td>
<td>Fall Winter</td>
</tr>
<tr>
<td>5</td>
<td>Utilize cover crops.</td>
<td>NH3, N2O, PM</td>
<td>2</td>
<td>Records Visual</td>
<td>Spr Summer</td>
<td>Fall Winter</td>
</tr>
<tr>
<td>6</td>
<td>Apply during cool weather and on still rather than windy days.</td>
<td>NH3, Odor, PM</td>
<td>1</td>
<td>Records Visual</td>
<td>Spr Summer</td>
<td>Fall Winter</td>
</tr>
<tr>
<td>7</td>
<td>Installation of windbreaks or shelterbelts.</td>
<td>Odor, PM</td>
<td>3</td>
<td>Records Visual</td>
<td>Spr Summer</td>
<td>Fall Winter</td>
</tr>
</tbody>
</table>

**VIII. Other BMPs and/or General Comments**
AIR QUALITY BMP SELECTION MATRIX

The matrix presented here provides a tool for selecting best management practices (BMPs) for air quality emission reduction. For detailed descriptions of respective BMPs, refer to the sister-document entitled “Descriptions of Best Management Practices (BMP)”. This current document is neither intended to provide detailed information as to how the BMPs should be selected (or implemented), nor is it the only feasible approach on selection (or implementation) of BMPs. It is expected that exact selection or implementation will vary from farm to farm. When applicable, be mindful of tradeoffs, limitations, or both for each BMP.

Definitions: \( NH_3 = \) ammonia; \( N_2O = \) nitrous oxide; \( H_2S = \) hydrogen sulfide; \( CH_4 = \) methane; \( VOC = \) volatile organic compounds; \( PM = \) particulate matter.

The following matrix outlines the process for identifying sources of emissions on your facility and how to choose and implement BMPs to mitigate those emissions. Use this chart and the detailed example that follows it as guides when developing your Air Quality Management Plan.

I. List the sources of emissions on the dairy.

II. For each source, list the expected pollutants in order of importance
(Example: VOCs for silage storage area; PM for dry open feedlots; etc.).

III. List the sources in order of importance with respect to expected or projected emission level
(Example: Open anaerobic lagoons because of their size and open nature, are likely be to more important with respect to air emissions than sand-settling basins; broadcast (big gun) land application is likely to have greater impact on air quality than injection; etc.).

IV. Define the emissions mitigation goal for each of the sources.
The goal for individual sources, for example, could be:
1. To address existing regulations – either local, State, or federal
2. To minimize nuisance lawsuits
3. To champion environmental stewardship
4. To address the most important pollutant in terms of volume or health impact
5. To address other goals

V. Depending on the goal for each source, list three BMPs to address the goal based on a three-tier-system with respect to effectiveness, cost, ease of implementation, compatibility with other BMPs, and in compatibility with your nutrient management plans.

1. Tier 1 being the least expensive and easy to implement
2. Tier 3 being the most advanced and most expensive to implement
I. **List the sources of emission on the dairy.** The following sources are the most common areas of air pollutant emission on a dairy operation. Not all areas may apply to your farm. Select the sources that do apply and list the specific factors (i.e., production areas) within that source that can contrite to air pollutant emission (e.g., Manure Storage may have manure holding pit, lagoon, and compost pile as areas within the source that can contribute emissions).

1. Nutrition
2. Feed Management
3. Milk Parlor
4. Housing - Freestall Barns
5. Housing - Drylot Pens
6. Grazing Management
7. Manure Management
8. Land Application
9. Other

II. **For each source, list the expected pollutants in order of importance.** For each source, the pollutants of concern have been listed below in general order of importance. Your farm may have a different order. When in doubt, use the order listed below.

1. Nutrition: NH₃, CH₄, H₂S, N₂O.
2. Feed Management: VOC, PM, Odor.
3. Milk Parlor: NH₃, VOC, Odor, H₂S.
4. Housing - Freestall Barns: NH₃, VOC, Odor, CH₄, H₂S.
5. Housing - Drylot Pens: NH₃, PM, Odor, H₂S, CH₄, VOC, N₂O.
6. Grazing Management: NH₃, N₂O.
III. List the sources in order of importance with respect to expected or projected emission level. For each pollutant of concern, the primary sources that emit that pollutant have been listed below in order of importance. Your farm may have a different order; when in doubt, use the order listed below. For each source, identify and list the specific factors that are contributing to that pollutant (these should have been listed in I. above).

1. Ammonia (NH₃)
   a. Nutrition
   b. Housing - Freestall Barns
   c. Housing - Drylot Pens
   d. Milk Parlor
   e. Land Application
   f. Manure Management
   g. Grazing Management
   h. Feed Management

2. Methane (CH₄)
   a. Manure Management
   b. Nutrition

3. Hydrogen Sulfide (H₂S)
   a. Manure Management
   b. Housing - Drylot Pens
   c. Nutrition

4. Volatile Organic Compounds (VOC)
   a. Feed Management
   b. Housing - Freestall Barns
   c. Housing - Drylot Pens
   d. Milk Parlor
   e. Manure Management

5. Particulate Matter (PM)
   a. Housing - Drylot Pens
   b. Land Application
   c. Feed Processing
   d. Manure Management

6. Nitrous Oxide (N₂O)
   a. Nutrition
   b. Housing - Drylot Pens
   c. Land Application
d. Grazing Management

7. Odor
   a. Land Application
   b. Manure Management
   c. Housing - Drylot Pens
   d. Housing - Freestall Barns
   e. Milk Parlor
   f. Feed Management
   g. Nutrition

IV. Define the emissions mitigation goal for each of the sources. Emission mitigation goals are going to be specific to your farm, objectives, and source emissions. List goals for each source.

   The goal for individual sources, for example, could be:
   • To address existing regulations – either local or federal
   • To minimize nuisance lawsuits
   • To champion environmental stewardship
   • To address the most important pollutant in terms of volume or health impact
   • To address other goals

V. Depending on the goal for each source, list three BMPs to address the goal based on a three-tier-system with respect to effectiveness, cost, ease of implementation, compatibility with other BMPs, and in compatibility with your nutrient management plans. Tier 1 being the least expensive and easy to implement. Tier 3 being the most advanced and most expensive to implement. Tier 1, 2, and 3 level BMPs have been listed for each source on a dairy farm. This list correlates to the BMPs listed in the “Descriptions of Best Management Practices (BMP)” document. This list is not exhaustive and tier level BMPs may vary for your individual farm. Refer to Table 1 (at the end of this document) for a selection matrix guide for choosing tier level BMPs for each source.

1. Nutrition
   a. Tier 1 - Properly Manage Level of Dietary Protein (%CP) in Diet to Match, Rather Than Exceed, an Animal’s Needs (NH₃, N₂O, Odor); Properly Manage and Minimize Overfeeding Sulfur in the Diet (H₂S, Odor).
   b. Tier 2 - Practice Group and/or Stage of Lactation Feeding (NH₃).
   c. Tier 3 - Increase the Level or Quality of Starch in the Diet (CH₄); Utilize feed additives to maximize efficiency (NH₃, H₂S, CH₄).

2. Feed Management
   a. Tier 1 - Regularly Remove Spilled and Unused Feed from Feeding Area (VOC, Odor, and PM); Manage or Minimize the Mixing of Feed During Windy Times (PM).
   b. Tier 2 - Properly Cover and Manage Ensiled Feedstuffs (VOC, Odor).
c. **Tier 3** - Store Feed in a Sheltered Storage Structure (VOC, Odor, PM).

3. **Milk Parlor**
   a. **Tier 1** - Use Recycled Parlor (Clean) Water Used for Flushing/Cleaning Parlor and Holding Area (NH₃, Odor); Ensure Proper Ventilation (NH₃, Odor, and PM).
   b. **Tier 2** - Remove Manure from Parlor and Holding Area Frequently (NH₃, VOC, Odor).
   c. **Tier 3** - Treat Recycled Water Used for Flushing/Cleaning Holding Area (NH₃, Odor);

4. **Housing - Freestall Barns**
   a. **Tier 1** - Remove Manure from Barns Frequently (NH₃, VOC, Odor); Ensure Proper Ventilation of Freestall Barns (NH₃, Odor, and PM).
   b. **Tier 2** - Bedding Selection and Management (NH₃, H₂S, Odor); Manure Removal Technology and Efficiency (NH₃, VOC, Odor).
   c. **Tier 3** - Treat Recycled Lagoon Water Used for Flushing (NH₃, Odor); Alleyway Floor Texture and Type (NH₃, VOC, Odor); Manure Removal Technology and Efficiency (NH₃, VOC, Odor).

5. **Housing - Drylot Pens**
   a. **Tier 1** - Spread (Harrow) Manure Frequently (NH₃, PM); Surface Moisture Content Management (NH₃, N₂O, VOC, Odor, CH₄, H₂S, Odor, PM).
   b. **Tier 2** - Remove Manure Frequently (NH₃, PM); Incorporate Wood Chips in Surface Layer (NH₃, PM, Odor); Use Straw Bedding in Drylot Pens (NH₃, PM, Odor); Knockdown and Remove Fence Line Manure (VOC, Odor).
   c. **Tier 3** - Urease Inhibitors (NH₃, N₂O); Provide Shade for Cattle (NH₃, PM); Sitting of Water Trough within Pen (NH₃, PM).

6. **Grazing Management**
   a. **Tier 1** - Stock Appropriate Number of Animals (NH₃, N₂O); Use Rotational Grazing (NH₃, N₂O).
   b. **Tier 2** - Move Water and Feeding Areas Frequently (NH₃, N₂O).
   c. **Tier 3** - Irrigate Immediately after Grazing (NH₃).

7. **Manure Management**
   a. **Tier 1** - Manure Solids Separation (NH₃, VOC, Odor, H₂S, CH₄); Properly Manage the Composting of Solid Manure (H₂S, Odor, PM, CH₄); Properly Manage Stockpiled Manure (H₂S, Odor, PM).
   b. **Tier 2** - Lagoon or Storage Covers (NH₃, H₂S, VOC, Odor, CH₄); Scrub Exhaust of Enclosed Waste Containers (CH₄, Odor, H₂S).
   c. **Tier 3** - Installation and Proper Operation of an Anaerobic Digester (CH₄); Surface Aeration of Lagoons (NH₃, H₂S, VOCs); Reduce the pH of Lagoons and
Manure Piles (NH$_3$, CH$_4$); Encourage Purple Sulfur Bacterial Formation in Anaerobic Lagoons (H$_2$S, Odor).

8. Land Application – Manure and/or Chemical Fertilizer
   a. *Tier 1* - Apply Nutrients According to Agronomic Recommendations Based on Soil and Manure Test Results (NH$_3$, N$_2$O); Inject or Incorporate Fertilizer into Soil within 24 Hours of Application (NH$_3$, Odor); Do Not Over-irrigate (NH$_3$, N$_2$O); Apply During Cool Weather and on Still Rather than Windy Days (NH$_3$, Odor, PM).
   b. *Tier 2* - Utilize Cover Crops (NH$_3$, N$_2$O, PM); Apply N Fertilizer below No-Till Residue (NH$_3$, PM).
   c. *Tier 3* - Installation of Windbreaks or Shelterbelts (Odor, PM).

9. Other
   a. *Tier 1* - Installation of Windbreaks or Shelterbelts (NH$_3$, Odor, PM).
   b. *Tier 2* - Vehicle Road Condition and Management (PM).
   c. *Tier 3* - Engine Selection and Efficiency (NOx).
Table 1. BMP selection matrix based on source and tier level mitigation

<table>
<thead>
<tr>
<th>Sources of emission on a dairy</th>
<th>Expected pollutants for each source in order of importance</th>
<th>Suggested BMPs for emissions reduction Tier 1</th>
<th>Suggested BMPs for emissions reduction Tier 2</th>
<th>Suggested BMPs for emissions reduction Tier 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>NH₃, CH₄, H₂S, N₂O</td>
<td>Properly Manage Level of Dietary Protein (NCP) in Diet to Match, Rather Than Exceed, an Animal’s Needs (NH₃, N₂O, Odor)</td>
<td>Properly Manage and Minimize Overfeeding Sulfur in the Diet (H₂S, Odor)</td>
<td>Increase the Level or Quality of Starch in the Diet (CH₄)</td>
</tr>
<tr>
<td>Feed Management</td>
<td>VOC, PM, Odor</td>
<td>Regularly remove Spilled and Unused Feed from Feeding Area (VOC, Odor, PM)</td>
<td>Properly Cover and Manage Ensilage Feedstuffs (VOC, Odor)</td>
<td>Utilize feed additives to maximize efficiency (NH₃, H₂S, CH₄)</td>
</tr>
<tr>
<td>Milk Parlor</td>
<td>NH₃, VOC, Odor, H₂S</td>
<td>Use Recycled Parlor (Clean) Water Used for Flushing/Cleaning Parlor and Holding Area (NH₃, Odor); Ensure Proper Ventilation (NH₃, Odor, and PM)</td>
<td>Remove Manure from Parlor and Holding Area Frequently (NH₃, VOC, Odor)</td>
<td>Store Feed in a Sheltered Storage Structure (VOC, Odor, PM)</td>
</tr>
<tr>
<td>Housing – Freestall Barns</td>
<td>NH₃, VOC, Odor, CH₄, H₂S</td>
<td>Remove Manure from Barns Frequently (NH₃, VOC, Odor); Ensure Proper Ventilation of Freestall barns (NH₃, Odor, and PM)</td>
<td>Bedding Selection and Manure Management (NH₃, H₂S, Odor)</td>
<td>Treat Recycled Water Used for Flushing/Cleaning Holding Area (NH₃, Odor)</td>
</tr>
<tr>
<td>Housing – Drylot Pens</td>
<td>NH₃, PM, Odor, H₂S, CH₄, VOC, N₂O</td>
<td>Spread (Harrow) Manure Frequently (NH₃, PM)</td>
<td>Manure Removal Technology and Efficiency (NH₃, VOC, Odor)</td>
<td>Treat Recycled Lagoon Water Used for Flushing (NH₃, Odor)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surface Moisture Content Management (NH₃, N₂O, VOC, Odor, CH₄, H₂S, Odor, PM)</td>
<td>Remove Manure Frequently (NH₃, PM)</td>
<td>Alleyway Floor Texture and Type (NH₃, VOC, Odor)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knockdown and Remove Fence Line Manure (VOC, Odor)</td>
<td>Incorporate Wood Chips in Surface Layer (NH₃, PM, Odor)</td>
<td>Manure Removal Technology and Efficiency (NH₃, VOC, Odor)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use Straw Bedding in Drylot Pens (NH₃, PM, Odor)</td>
<td>Urea Inhibitors (NH₃, N₂O)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Knockdown and Remove Fence Line Manure (VOC, Odor)</td>
<td>Provide Shade for Cattle (NH₃, PM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sitting of Water Trough within Pen (NH₃, PM)</td>
</tr>
<tr>
<td>Source of Emission</td>
<td>Expected Pollutants</td>
<td>Suggested BMPs for Emissions Reduction Tier 1</td>
<td>Suggested BMPs for Emissions Reduction Tier 2</td>
<td>Suggested BMPs for Emissions Reduction Tier 3</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Grazing Management</td>
<td>( \text{NH}_3, \text{N}_2\text{O} )</td>
<td>Stock Appropriate Number of Animals (( \text{NH}_3, \text{N}_2\text{O} )) Use Rotational Grazing (( \text{NH}_3, \text{N}_2\text{O} ))</td>
<td>Move Water and Feeding Areas Frequently (( \text{NH}_3, \text{N}_2\text{O} ))</td>
<td>Irrigate Immediately after Grazing (( \text{NH}_3 ))</td>
</tr>
<tr>
<td>Manure Storage</td>
<td>Liquid: ( \text{NH}_3, \text{H}_2\text{S}, \text{CH}_4, \text{Odor, VOC} ) Solid: ( \text{NH}_3, \text{H}_2\text{S}, \text{PM, CH}_4 )</td>
<td>Manure Solids Separation (( \text{NH}_3, \text{VOC, Odor, H}_2\text{S, CH}_4) Properly Manage the Composting of Solid Manure (( \text{H}_2\text{S, Odor, PM, CH}_4) ) Properly Manage Stockpiled Manure (( \text{H}_2\text{S, Odor, PM) )</td>
<td>Lagoon or Storage Covers (( \text{NH}_3, \text{H}_2\text{S, VOC, Odor, CH}_4) ) Scrub Exhaust of Enclosed Waste Containers (( \text{CH}_4, \text{Odor, H}_2\text{S} ))</td>
<td>Installation of an Anaerobic Digester (( \text{CH}_4 )) Surface Aeration of Lagoons (( \text{NH}_3, \text{H}_2\text{S, VOC} )) Reduce the pH of Manure (( \text{NH}_3, \text{CH}_4) ) Encourage Purple Sulfur Bacterial Formation in Lagoons (( \text{H}_2\text{S, Odor) )</td>
</tr>
<tr>
<td>Land Application</td>
<td>( \text{NH}_3, \text{PM, Odor, N}_2\text{O} )</td>
<td>Apply Nitrogen According to Agronomic Recommendations Based on Soil and Manure Test Results (( \text{NH}_3, \text{N}_2\text{O} )) Inject or Incorporate fertilizer into soil within 24 Hours of Application (( \text{NH}_3, \text{Odor} )) Do Not Over-Irrigate (( \text{NH}_3, \text{N}_2\text{O} )) Apply during cool weather and on still rather than windy days (( \text{NH}_3, \text{Odor, PM) )</td>
<td>Utilize Cover Crops (( \text{NH}_3, \text{N}_2\text{O, PM) ) Apply N Fertilizer below No-Till Residue (( \text{NH}_3, \text{PM) )</td>
<td>Installation of Windbreaks or Shelterbelts (( \text{Odor, PM) )</td>
</tr>
</tbody>
</table>
AQMP for Dairy Operations Pilot Project
BMP Inspection Checklist

Dairy Name: __________________________________________ Date: ___________ Time: _________

Owner Name: _________________________________________ Phone: ______________________

Physical Address: ______________________ City: ______________ Zip Code: ______________

Animal Numbers: Milking________ Dry________ Heifer________ Calf________

On the map: what numbering? What type of cows and how many cows per pens/where?

Calves raise on site? If not where at? Period:

What percent of your farm is: Drylot________ Freestall/Scrape________ Freestall/Flush________
<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier Level</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Nutrition</td>
<td>[Nutritioniste Name:]</td>
<td>Phone:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Reduce the amount of dietary protein (N) in the ration to match, rather than exceed, the animal’s needs.</td>
<td>NH₃, N₂O, Odor</td>
<td>1</td>
<td>Records</td>
<td></td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td>*(Anything&lt;16%) N%:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MUN #:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Increase the level of starch in the diet.</td>
<td>CH₄</td>
<td>3</td>
<td>Records</td>
<td></td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td>Comments: <strong>Starch:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Properly manage and minimize overfeeding sulfur in the diet.</td>
<td>H₂S, Odor</td>
<td>1</td>
<td>Records</td>
<td></td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td>Comments: <strong>S%:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Practice group-feeding.</td>
<td>NH₃</td>
<td>2</td>
<td>Records</td>
<td></td>
<td>Spr</td>
</tr>
<tr>
<td></td>
<td><em>Separating high production cows from heifers, calves, etc for feeding</em> How many groups of each?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## II. Feed Management

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier Level</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Properly cover and manage ensiled feedstuffs.</td>
<td>VOC, Odor</td>
<td>2</td>
<td></td>
<td>Records</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>(minimized exposure time or exposed surface)</td>
<td></td>
<td></td>
<td></td>
<td>Visual</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sillage: height? Covered?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Store feed in a weatherproof storage structure.</td>
<td>VOC, Odor, PM</td>
<td>3</td>
<td></td>
<td>Records</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Feed bunkers and/or covered piles -&gt; protect against rain/wind</td>
<td></td>
<td></td>
<td></td>
<td>Visual</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Metal covered? Completely enclosed? None?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Remove spilled and unused feed from feeding areas on a regular basis.</td>
<td>VOC, Odor, PM</td>
<td>1</td>
<td></td>
<td>Records</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>(regular = every 2 weeks)</td>
<td></td>
<td></td>
<td></td>
<td>Visual</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>How do you manage the feeding during windy time? Any changes to adapt?</td>
<td>PM</td>
<td>2</td>
<td></td>
<td>Records</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>How many times you feed per day? When?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### III. Housing - Freestall Barns

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier Level</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ensure proper ventilation.</td>
<td>NH₃, Odor, PM</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Bedding selection and management.</td>
<td>NH₃, H₂S, Odor</td>
<td>2</td>
<td>Records</td>
<td>Visually</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Treat recycled lagoon water used for flushing.</td>
<td>NH₃, Odor</td>
<td>3</td>
<td>Records</td>
<td>Visually</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Remove manure from barns frequently.</td>
<td>NH₃, VOC, Odor</td>
<td>1</td>
<td>Records</td>
<td>Visually</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Modify alleyway floors.</td>
<td>NH₃, VOC, Odor</td>
<td>3</td>
<td>Records</td>
<td>Visually</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Type:** Sand, Wood Shavings, Straw, Recycled manure, other  
**Mngmt:** frequent restocking, daily solids removal, annual bed change  
**Comments:** (Treat = solids removal or use of additive)

**Flush?**  
**Hose or Scrape?**  
**Technology/Equipment?**  

**Comments:**
<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier Level</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provide shade for cattle.</td>
<td>NH₃, PM</td>
<td>3</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Permanent? Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Removable? Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pen Number where the shades are not/ are present:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Locate feed and water opposite in pens.</td>
<td>NH₃, PM</td>
<td>3</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pen Number where the water and feeding area are not/ are adjacent:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Remove and spread (harrow) manure frequently.</td>
<td>NH₃, PM</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Complete removal frequency (1-3 mos)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daily harrowing? Time of day (early morning)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The feed alleys, management:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scrape? Frequency:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vacuum? Frequency:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flushed? Frequency:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Use straw bedding in drylot pens.</td>
<td>NH₃, PM, Odor</td>
<td>2</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pen Number where the straw are not/ are applied:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Incorporate wood chips in surface layer.</td>
<td>NH₃, PM, Odor</td>
<td>2</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pen Number where the wood chip are not/ are applied:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Use urease inhibitors.</td>
<td>NH₃, N₂O</td>
<td>3</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Feed or surface applied?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Surface moisture content management.</td>
<td>NH₃, N₂O, VOC, CH₄,</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>(water for dust mitigation only, moisture level ~28%, avoid standing water)</td>
<td>H₂S, PM, Odor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Knock down and remove fence line manure.</td>
<td>VOC, Odor</td>
<td>2</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Comments: (when build-up &gt; 12 inches)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frequency:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Best Management Practice</td>
<td>Emissions Impacted</td>
<td>Tier</td>
<td>Level of Implementation (0=None, 5=Full)</td>
<td>Verification Method</td>
<td>Applicable Seasons</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------</td>
<td>--------------------</td>
<td>------</td>
<td>-------------------------------------------</td>
<td>---------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>1</td>
<td>Stock appropriate number of animals.</td>
<td>NH₃, N₂O</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Use rotational grazing.</td>
<td>NH₃, N₂O</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td></td>
<td>Comments: (remove animals when plants &lt; 3 inches tall)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Move water and feeding areas frequently.</td>
<td>NH₃, N₂O</td>
<td>2</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Irrigate immediately after grazing.</td>
<td>NH₃</td>
<td>3</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## VI. Manure Management

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier Level</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manure solids separation</td>
<td>NH₃, CH₄, H₂S, Odor</td>
<td>1</td>
<td>Screen, rotary drum, centrifugal tanks, earthen pit, weeping walls, screw press</td>
<td>Records Visual</td>
<td>Spr, Sum</td>
</tr>
<tr>
<td>2</td>
<td>Lagoon or storage covers</td>
<td>NH₃, VOC, CH₄, H₂S, Odor</td>
<td>2</td>
<td>Floating plastic, synthetic or natural peat, straw, polystyrene, natural dry matter/crust</td>
<td>Records Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td>3</td>
<td>Scrub exhaust of enclosed waste containers.</td>
<td>NH₃, VOC, CH₄, H₂S, Odor</td>
<td>2</td>
<td>Records Visual</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Installation and proper maintenance of an anaerobic digester.</td>
<td>VOC, Odor, CH₄</td>
<td>3</td>
<td>Records Visual</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Surface aeration of lagoons.</td>
<td>NH₃, VOC, H₂S, Odor</td>
<td>3</td>
<td>Records Visual</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Reduce the pH of lagoons and manure piles.</td>
<td>NH₃, H₂S, Odor</td>
<td>3</td>
<td>Records Visual</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Encourage purple sulfur bacterial formation in anaerobic lagoons.</td>
<td>NH₃, H₂S, Odor</td>
<td>3</td>
<td>Records Visual</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Properly manage composted solid manure.</td>
<td>H₂S, Odor, PM</td>
<td>1</td>
<td>Records Visual</td>
<td>Spr, Sum</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Properly manage stockpiled manure.</td>
<td>CH₄, H₂S, Odor, PM</td>
<td>1</td>
<td>Records Visual</td>
<td>Spr, Sum</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

- (C:N > 12:1 (30:1 optimal), low moisture, high temp, high aeration) frequency of manure tests?
- (conditions: low solids content, pH 7.0-8.5)
- (stored in covered area to avoid over-saturation, or periodically turn)

Size of the Lagoons:

Where does it go From the lagoon to:
<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Apply N fertilizer below no-till residue.</td>
<td>NH₃, Odor, PM, H₂S, N₂O</td>
<td>2</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td>2a</td>
<td>Inject fertilizer/manure fertilizer at application (corn).</td>
<td>NH₃, Odor, PM, H₂S, N₂O, VOCs, CH₄</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td>2b</td>
<td>Inject or incorporate fertilizer/manure into soil within 24 hours of application (forage).</td>
<td>NH₃, Odor, PM, H₂S, N₂O, VOCs, CH₄</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td>3</td>
<td>Apply nutrients according to agronomic recommendations based on soil test results.</td>
<td>NH₃, N₂O, Odor</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td>4</td>
<td>Do not over-irrigate.</td>
<td>NH₃, N₂O</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td>5</td>
<td>Utilize cover crops.</td>
<td>NH₃, N₂O, PM</td>
<td>2</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
<tr>
<td>6</td>
<td>Apply during cool weather and on still rather than windy days.</td>
<td>NH₃, Odor, PM, H₂S, VOCs</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr, Sum, Fall, Wint</td>
</tr>
</tbody>
</table>
### VIII. Milk Parlor & Holding Pens

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier Level</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ensure proper ventilation.</td>
<td>NH₃</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr   Sum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fall  Wint</td>
</tr>
<tr>
<td>2</td>
<td>Use recycled parlor (clean) water used for flushing holding pen.</td>
<td>NH₃, Odor, H₂S, VOCs</td>
<td>3</td>
<td>Records</td>
<td>Visual</td>
<td>Spr   Sum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fall  Wint</td>
</tr>
<tr>
<td>3</td>
<td>Use treated-Fresh water for flushing parlor.</td>
<td>NH₃, Odor, H₂S, VOCs</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr   Sum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fall  Wint</td>
</tr>
<tr>
<td>4</td>
<td>Remove manure from holding area frequently.</td>
<td>NH₃, VOC, Odor</td>
<td>3</td>
<td>Records</td>
<td>Visual</td>
<td>Spr   Sum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fall  Wint</td>
</tr>
</tbody>
</table>

Comments: (Treat = solids removal or use of additive)

Temperature Controlled ventilation?

How many times milk per day?

Flush or Hose? Frequency?

Scrape? Frequency?

Flush? Frequency?

Scrape? Frequency?

Urine and feces separation: sloped floors, double-sloped w/ gutter, grooved?
<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Emissions Impacted</th>
<th>Tier Level</th>
<th>Level of Implementation (0=None, 5=Full)</th>
<th>Verification Method</th>
<th>Applicable Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Installation of windbreaks or shelterbelts.</td>
<td>( \text{NH}_3 ), Odor, PM, ( \text{H}<em>2\text{S} ), ( \text{VOC}</em>{\text{s}} )</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Vehicle road condition management.</td>
<td>PM</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Engine selection and efficiency.</td>
<td>NOx</td>
<td>1</td>
<td>Records</td>
<td>Visual</td>
<td>Spr Sum Fall Wint</td>
</tr>
<tr>
<td></td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X. Comments

- Futur improvements? A 5 year plan?
- What is your mortality rate?
- What do you do with it? Compost To someplace else:
- What is the History of the Dairy?
- When was the parlors built?
- How many employee?
August 29, 2016

C & L Farm
Attn: Clifford Nilles
2190 Ray Road
Sunnyside, WA 98944

Re: Corrected Copy of the C&L Farm Dairy Evaluation

Mr. Nilles:

Please find enclosed a corrected copy of the C&L Farm Dairy Report and Score Sheet. Both were amended to include the reported lagoon pH of 7.22.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 112.

Keith M. Hurley
Keith M. Hurley
Compliance & Enforcement Division Supervisor

Encl.
Site Visit Report
Score Sheet
August 22, 2016

C & L Farm
C/o Clifford Nilles, Owner
2190 Ray Road
Sunnyside, WA 98944

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) Evaluation

Mr. Nilles:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on August 16, 2016. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 108.

Dustin Harrington
Dustin Harrington
Compliance Inspector

Encl: Site Visit Report
Score Sheet
### AQ BMP Score Sheet

#### Description of Score Sheet
- Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documention of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCCA, 2011). **How to use this table:**
  1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2. Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

#### Overall Score (%) & Grade:

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Category</th>
<th>Implementation Score (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>100 100 100 100 100 100</td>
</tr>
</tbody>
</table>

#### BMP Best Management Practice

<table>
<thead>
<tr>
<th>Category</th>
<th>Implementation Score (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100 100 100 100 100 100</td>
</tr>
</tbody>
</table>

#### Overall BMP Effectiveness by Pollutant (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Implementation Score (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>87 91 80 79 84 83 83</td>
</tr>
</tbody>
</table>

#### BMP Details

**I. Nutrition**
- Properly manage level of dietary protein (%CP)
- Feed increased level or quality of starch in diet
- Manage and minimize overheating of sulfur-containing feed
- Practice group and/or stage of lactation feeding

**II. Feed Management**
- Properly manage ensiled feedstuffs
- Store feed in a sheltered storage structure
- Regularly remove spilled and unused feed from feeding area
- Manage or minimize feed mixing during windy times

**III. Housing - Freestall Barns**
- Ensure proper ventilation
- Use recycled (clean) or treated water for flushing parlor
- Use recycled (clean) or treated water for cleaning holding pen
- Remove manure from holding area frequently

**IV. Housing - Drylot Pens**
- Provide shade for cattle
- Sitting of water trough within pen
- Remove manure frequently
- Spread (harrow) manure frequently
- Incorporate wood chips into surface layer
- Utilize urease inhibitors
- Surface moisture content management
- Knock down and remove fence line manure

**V. Grazing Management**
- Stock appropriate number of animals
- Use rotational grazing
- Move water and feeding areas frequently
- Irrigate immediately after grazing

**VI. Manure Management**
- Manure solids - mechanical separation
- Lagoon or storage covers
- Scrub exhaust of enclosed waste containers
- Install and properly maintain a methane digester
- Surface aeration of lagoons
- Reduce the pH of lagoons and manure piles below 6
- Encourage purple sulfur bacterial formation in anaerobic lagoons
- Properly manage the composting of manure
- Properly manage stockpiled manure

**VII. Land Application - Manure or Chemical Fertilizer**
- Apply fertilizer below no-till residue
- Inject fertilizer/manure into soil at application (corn)
- Incorporate fertilizer/manure into soil within 24 hours of application (forage)
- Apply nutrients according to agronomic recommendations based on soil and manure test results
- Do not over-irrigate
- Utilize cover crops
- Apply during cool weather and on still rather than windy days

**IX. Other**
- Installation of windbreaks or shelterbelts
- Vehicle road condition management
- Engine selection and efficiency

**Overall Level of BMP Effectiveness by Pollutant (%)**
- Overall score is a composite score of scores from each BMP category, based on the visual evaluation and/or documention of practices assessed during inspections.
1. General Information:
   1.1 Facility
   Dairy Name: C & L Farm.
   Mailing Address: 2190 Ray Road, Sunnyside, WA, 98944
   Facility Location: 3280 Sheller Road, Sunnyside, WA, 98944
   Contact Name: Ron Nilles

   1.2. Inspection
   Date and Time of Inspection: August 16, 2016 @ 9:30 AM
   YRCAA Inspectors: Keith Hurley, Mr. Dustin Harrington
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A) To determine whether the BMPs listed in the C & L Farm Air Quality Management Plan (AQMP) are implemented effectively.
   B) Identify BMPs which can be improved upon in order to achieve reasonable air emission reduction/prevention.
   Inspection Summary: Ron Nilles met Keith and Dustin at the facility on the date and time listed above. Ron informed Keith that he is the Dairy Foreman and should be listed as the primary contact with YRCAA. He also suggested that the agency continue to list his mother, Lorene Nilles, as the secondary contact. Keith reviewed the C&L Farm Air Quality Management Plan with Ron.

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management:
   2.1.2 Feed Management:
   2.1.3 RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.3 Housing – Drylot Pens:

2.1.4 Manure Management:

2.1.5 Land Application:

2.1.7 Milk Parlor & Holding Area:
2.2 Major Air Emissions Sources:

2.2.1 Nutrition Management:

2.2.2 Feed Management:

2.2.3 Housing – Drylot Pens:

2.2.4 Housing – Freestall Pens:

2.2.5 Manure Management:

2.2.6 Land Application:

2.2.7 Parlor & Holding Pens:

3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing an air pollutant, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:

3.1 Nutrition Management:

3.2 Feed Management:

3.3 Housing – Drylot Pens:

3.4 Manure Management:
3.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.
4. **BMP Implementation Determination**
   4.1 **Inspector Determination**
   This determination is based on the following actions:
   - Review of Dairy AQMP
   - On Site Inspection, including (check each aspect inspected):
     - On-site record keeping;
     - Best Management Practices being implemented:
   **Inspector Certification:**
   - Based on the above actions, I find:
     - ☑ No additional information needed.
     - ☐ Additional information requested.
     - ☐ The Dairy was unable to provide adequate information for a full inspection.

   **Dustin Harrington**
   Dustin Harrington
   Compliance & Enforcement Division Field Agent  
   Date August 22, 2016

4.2 **Compliance Determination:**
   This determination is based on the following actions:
   - ☑ Review of Dairy AQMP
   - ☑ Review of records on-site
   - ☑ Review of Best Management Practices being implemented

   **Compliance Certification:**
   Based on the above actions, I find:
   - ☑ All BMPs listed in the AQMP were confirmed on inspection.
   - ☐ Additional information requested.
   - ☐ Another inspection is necessary to confirm implementation of BMPs.
   - ☐ One or more BMPs need immediate attention due to the current system conditions.

   **Keith M. Hurley**
   Keith Hurley
   Compliance & Enforcement Division Supervisor  
   Date August 22, 2016
YRCAA COMPLIANCE MONITORING STRATEGY (CMS) FOR FFY2014

I. PURPOSE

The purpose of this document is to define YRCAA’s planned activities for monitoring stationary source compliance with the FCAA, the WCAA, and local regulations pursuant to either act. This strategy has been developed to demonstrate YRCAA compliance with EPA’s Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS), dated September 10, 2010.

II. PLAN ELEMENTS

(1) Facility list of all Title V major sources.
The list identifies which fiscal year a full compliance evaluation (FCE) will be completed, including when a site visit will be conducted. (See Table 1)

(2) Facility list of all synthetic minor (SM) sources.
In 2007 all SM sources were determined to have actual emissions at less than 80% of the major source thresholds (100/10/25 tpy) and have been removed from applicability to the CMS.

(3) Description of how YRCAA will address any program deficiencies.
YRCAA does not directly input information into the national air compliance database (AFS). For the foreseeable future, the agency plans to continue to email AFS Action data to the Region X office for entry into AFS no later than 60 days after completion. YRCAA will continue this method until such time as the agency has the capability to directly enter the data into the AFS database.

III. OVERVIEW OF YRCAA COMPLIANCE MONITORING PRIORITIES

YRCAA is committed to assuring compliance with the requirements of the FCAA. YRCAA also is responsible for, and committed to, assuring compliance with the WCAA and the rules promulgated there under. However, program elements such as minor new source review, minor source registration and area source complaint response are not covered in the CMS. It should be understood that, for some pollutants of concern, work in these program elements is most effective in preventing air pollution.

YRCAA strives to maintain a balance of resource allocation between sources subject to the Compliance Monitoring Strategy and those significant sources which are not. Compliance efforts will be focused on sources of PM$_{2.5}$ emissions from November through March. We believe this to be the most effective strategy in maintaining healthful air quality in Yakima County. Non-CMS compliance evaluations are listed in Table 2. Annual commitments are summarized in Table 3.

YRCAA has a compliance planning process which includes an annual assessment of the agency’s compliance monitoring plan as well as a review, and update if necessary, of the effectiveness of that plan.
### Table 1 - YRCAA CMS FOR FFY2014

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>AFS #</th>
<th>Major (A) Synthetic Minor(S)</th>
<th>FCE Commitment</th>
<th>On Site Visit</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shields Bag &amp; Printing</td>
<td>0060</td>
<td>A</td>
<td>2014</td>
<td>2013</td>
<td>Site Visit scheduled for November 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Compliance Evaluation planned for August 2014</td>
</tr>
<tr>
<td>Terrace Heights Landfill</td>
<td>0011</td>
<td>A</td>
<td>2014</td>
<td>2014</td>
<td>Site Visit planned for April 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Compliance Evaluation planned for August 2014</td>
</tr>
<tr>
<td>CanAm Steel</td>
<td>0059</td>
<td>A</td>
<td>2014</td>
<td>2014</td>
<td>Site Visit planned for July 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Compliance Evaluation planned for August 2014</td>
</tr>
<tr>
<td>Cheyne Landfill</td>
<td>0063</td>
<td>A</td>
<td>2014</td>
<td>2014</td>
<td>Site Visit planned for June 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Compliance Evaluation planned for August 2014</td>
</tr>
</tbody>
</table>

### Table 2 - NON-CMS COMPLIANCE MONITORING PLAN FFY2010

<table>
<thead>
<tr>
<th>Source Type</th>
<th># Evaluations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Processors</td>
<td>17</td>
</tr>
<tr>
<td>Auto Body Shops</td>
<td>49</td>
</tr>
<tr>
<td>Dairies</td>
<td>62</td>
</tr>
<tr>
<td>Dry Cleaners</td>
<td>9</td>
</tr>
<tr>
<td>Rock Crushers - Permanent</td>
<td>4</td>
</tr>
<tr>
<td>Rock Crushers - Portable</td>
<td>3</td>
</tr>
<tr>
<td>Asphalt Plants</td>
<td>4</td>
</tr>
<tr>
<td>Category</td>
<td>Value</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Cement Plants</td>
<td>5</td>
</tr>
<tr>
<td>Wood Products</td>
<td>11</td>
</tr>
<tr>
<td>Metal Fabricator</td>
<td>27</td>
</tr>
<tr>
<td>Feedlots</td>
<td>10</td>
</tr>
<tr>
<td>Printers</td>
<td>15</td>
</tr>
<tr>
<td>Cabinet Shops</td>
<td>7</td>
</tr>
<tr>
<td>Waste Water Treatment Plants</td>
<td>14</td>
</tr>
<tr>
<td>Gas Stations</td>
<td>107</td>
</tr>
<tr>
<td>All Others</td>
<td>45</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>389</strong></td>
</tr>
</tbody>
</table>

NOTE: Approximately 200 sources are scheduled for evaluation in FFY2014, plus any new sources discovered. Any new sources discovered and evaluated in FFY 2014 will have their next evaluation in FFY 2015.

**TABLE 3 - EVALUATION COMMITMENTS FOR FFY2014**

<table>
<thead>
<tr>
<th>TOTAL CMS FCE</th>
<th>MAJOR FCE</th>
<th>80%+ SM FCE</th>
<th>MINOR FCE</th>
<th>STACK TESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>0</td>
<td>389</td>
<td>0</td>
</tr>
</tbody>
</table>

**INITIAL TITLE V CERTIFICATIONS**

<table>
<thead>
<tr>
<th>ANNUAL TITLE V CERTIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>
YRCAA COMPLIANCE MONITORING STRATEGY (CMS) FOR FFY2015

I. PURPOSE

The purpose of this document is to define YRCAA’s planned activities for monitoring stationary source compliance with the FCAA, the WCAA, and local regulations pursuant to either act. This strategy has been developed to demonstrate YRCAA compliance with EPA’s Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS), dated September 10, 2010.

II. PLAN ELEMENTS

(1) Facility list of all Title V major sources.
The list identifies which fiscal year a full compliance evaluation (FCE) will be completed, including when a site visit will be conducted. (See Table 1)

(2) Facility list of all synthetic minor (SM) sources.
In 2007 all SM sources were determined to have actual emissions at less than 80% of the major source thresholds (100/10/25 tpy) and have been removed from applicability to the CMS.

(3) Description of how YRCAA will address violations.

III. OVERVIEW OF YRCAA COMPLIANCE MONITORING PRIORITIES

YRCAA is committed to assuring compliance with the requirements of the FCAA. YRCAA also is responsible for, and committed to, assuring compliance with the WCAA and the rules promulgated there under. However, program elements such as minor new source review, minor source registration and area source complaint response are not covered in the CMS. It should be understood that, for some pollutants of concern, work in these program elements is most effective in preventing air pollution.

YRCAA strives to maintain a balance of resource allocation between sources subject to the Compliance Monitoring Strategy and those significant sources which are not. Compliance efforts will be focused on sources of PM$_{2.5}$ emissions from November through March. We believe this to be the most effective strategy in maintaining healthful air quality in Yakima County. Non-CMS compliance evaluations are listed in Table 2. Annual commitments are summarized in Table 3.

YRCAA has a compliance planning process which includes an annual assessment of the agency’s compliance monitoring plan as well as a review, and update if necessary, of the effectiveness of that plan.
### Table 1 - YRCAA CMS FOR FFY2015

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>AFS #</th>
<th>Major (A)</th>
<th>Synthetic Minor(S)</th>
<th>FCE Commitment</th>
<th>On Site Visit</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shields Bag &amp; Printing</td>
<td>0060</td>
<td>A</td>
<td></td>
<td>2015</td>
<td>2014</td>
<td>Site Visit scheduled for November 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Compliance Evaluation planned for August 2015</td>
</tr>
<tr>
<td>Terrace Heights Landfill</td>
<td>0011</td>
<td>A</td>
<td></td>
<td>2015</td>
<td>2015</td>
<td>Site Visit planned for April 2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Compliance Evaluation planned for August 2015</td>
</tr>
<tr>
<td>SUNSTEEL LLC (Formerly CanAm)</td>
<td>0059</td>
<td>A</td>
<td></td>
<td>2015</td>
<td>2015</td>
<td>Site Visit planned for July 2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Compliance Evaluation planned for August 2015</td>
</tr>
<tr>
<td>Cheyne Landfill</td>
<td>0063</td>
<td>A</td>
<td></td>
<td>2015</td>
<td>2015</td>
<td>Site Visit planned for June 2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full Compliance Evaluation planned for August 2015</td>
</tr>
</tbody>
</table>

### Table 2 - NON-CMS COMPLIANCE MONITORING PLAN FFY2010

<table>
<thead>
<tr>
<th>Source Type</th>
<th># Evaluations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairies</td>
<td>60</td>
</tr>
<tr>
<td>Dry Cleaners</td>
<td>9</td>
</tr>
<tr>
<td>Metal Manufacturing</td>
<td>8</td>
</tr>
<tr>
<td>Animal Feeding Operations (AFO)</td>
<td>16</td>
</tr>
<tr>
<td>Waste Water Treatment Plants</td>
<td>12</td>
</tr>
<tr>
<td>Gas Stations</td>
<td>118</td>
</tr>
<tr>
<td>Industrial Commercial</td>
<td>135</td>
</tr>
<tr>
<td>Backup Generators</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Boilers</td>
<td>10</td>
</tr>
<tr>
<td>Solvent Producers</td>
<td>1</td>
</tr>
<tr>
<td>Graphic Printing</td>
<td>14</td>
</tr>
<tr>
<td>Surface Coating</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total Non-Title V Sources</strong></td>
<td><strong>515</strong></td>
</tr>
</tbody>
</table>

NOTE: Approximately 200 sources are scheduled for evaluation in FFY2015. Any new sources discovered will be evaluated in FFY 2016, and will be scheduled for reevaluation in FFY 2016, depending on source type.

**TABLE 3 - EVALUATION COMMITMENTS FOR FFY2016**

<table>
<thead>
<tr>
<th>TOTAL CMS FCE</th>
<th>MAJOR FCE</th>
<th>80%+ SM FCE</th>
<th>MINOR FCE</th>
<th>STACK TESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>0</td>
<td>515</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INITIAL TITLE V CERTIFICATIONS</th>
<th>ANNUAL TITLE V CERTIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>
I. PURPOSE

The purpose of this document is to define YRCAA’s planned activities for monitoring stationary source compliance with the FCAA, the WCAA, and local regulations pursuant to either act. This strategy has been developed to demonstrate YRCAA compliance with EPA’s Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS), dated September 10, 2010.

II. PLAN ELEMENTS

1. Facility list of all Title V major sources.
   The list identifies which fiscal year a full compliance evaluation (FCE) will be completed, including when a site visit will be conducted. (See Table 1)

2. Facility list of all synthetic minor (SM) sources.
   In 2007 all SM sources were determined to have actual emissions at less than 80% of the major source thresholds (100/10/25 tpy) and have been removed from applicability to the CMS.

3. Description of how YRCAA will address violations.

III. OVERVIEW OF YRCAA COMPLIANCE MONITORING PRIORITIES

YRCAA is committed to assuring compliance with the requirements of the FCAA. YRCAA also is responsible for, and committed to, assuring compliance with the WCAA and the rules promulgated there under. However, program elements such as minor new source review, minor source registration and area source complaint response are not covered in the CMS. It should be understood that, for some pollutants of concern, work in these program elements is most effective in preventing air pollution.

YRCAA strives to maintain a balance of resource allocation between sources subject to the Compliance Monitoring Strategy and those significant sources which are not. Compliance efforts will be focused on sources of PM 2.5 emissions from November through March. We believe this to be the most effective strategy in maintaining healthful air quality in Yakima County. Non-CMS compliance evaluations are listed in Table 2. Annual commitments are summarized in Table 3.

YRCAA has a compliance planning process which includes an annual assessment of the agency’s compliance monitoring plan as well as a review, and update if necessary, of the effectiveness of that plan.
**Table 1 - YRCAA CMS FOR FFY2016**

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>ICIS-Air Prog. ID</th>
<th>Major (A) / Synthetic Minor(S)</th>
<th>FCE Commitment</th>
<th>On Site Visit</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrace Heights Landfill</td>
<td>WAYRC 0005307700011</td>
<td>A</td>
<td>2016</td>
<td>2016</td>
<td>Site Visit planned for April 2016; Full Compliance Evaluation planned for August 2016</td>
</tr>
<tr>
<td>SUNSTEEL LLC (Formerly CanAm)</td>
<td>WAYRC 0005307700059</td>
<td>A</td>
<td>2016</td>
<td>2016</td>
<td>Site Visit planned for July 2016; Full Compliance Evaluation planned for August 2016</td>
</tr>
<tr>
<td>Cheyne Landfill</td>
<td>WAYRC 0005307700063</td>
<td>A</td>
<td>2016</td>
<td>2016</td>
<td>Site Visit planned for June 2016; Full Compliance Evaluation planned for August 2016</td>
</tr>
</tbody>
</table>

**Table 2 - NON-CMS COMPLIANCE MONITORING PLAN FFY2016**

<table>
<thead>
<tr>
<th>Source Type</th>
<th># Evaluations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairies</td>
<td>60</td>
</tr>
<tr>
<td>Dry Cleaners</td>
<td>9</td>
</tr>
<tr>
<td>Metal Manufacturing</td>
<td>8</td>
</tr>
<tr>
<td>Animal Feeding Operations (AFO)</td>
<td>16</td>
</tr>
<tr>
<td>Category</td>
<td>Count</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Waste Water Treatment Plants</td>
<td>12</td>
</tr>
<tr>
<td>Gas Stations</td>
<td>118</td>
</tr>
<tr>
<td>Industrial Commercial</td>
<td>135</td>
</tr>
<tr>
<td>Backup Generators</td>
<td>12</td>
</tr>
<tr>
<td>Boilers</td>
<td>10</td>
</tr>
<tr>
<td>Solvent Producers</td>
<td>1</td>
</tr>
<tr>
<td>Graphic Printing</td>
<td>14</td>
</tr>
<tr>
<td>Surface Coating</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total Non-Title V Sources</strong></td>
<td><strong>515</strong></td>
</tr>
</tbody>
</table>

NOTE: Approximately 200 sources are scheduled for evaluation in FFY2016. Any new sources discovered will be evaluated in FFY 2016, and will be scheduled for reevaluation in FFY 2016, depending on source type.

**TABLE 3 - EVALUATION COMMITMENTS FOR FFY2016**

<table>
<thead>
<tr>
<th>TOTAL CMS FCE</th>
<th>MAJOR FCE</th>
<th>80%+ SM FCE</th>
<th>MINOR FCE</th>
<th>STACK TESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
<td>0</td>
<td>515</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INITIAL TITLE V CERTIFICATIONS</th>
<th>ANNUAL TITLE V CERTIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>
October 24, 2011

Tom DeVries, Owner
DeVries Family Farm
15720 State Route 24
Moxee, WA 98936

RE: Air Quality Best Management Practices (BMP) Score Sheet

Dear Mr. DeVries:

As part of the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project a score sheet was prepared which critically examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons
Engineer/Planner

Cc Keith Hurley, Compliance Division Supervisor
Encl.
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:
   1.1 Facility
      Dairy Name: DeVries Family Farm
      Mailing Address: 15720 State Route 24, Moxee, WA  98936
      Facility Location: 15720 State Route 24, Moxee, WA  98936
      Contact Name: Thomas DeVries

   1.2. Inspection
      Date and Time of Inspection: 5/11/11 at 1:00 PM
      YRCAA Inspectors: Mr. Mark Edler and Ms. Teresa Coons
      Inspection Rationale: To determine feasible and effective techniques for the prevention of air
                           emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air
                           Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best
      Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully
                        implemented and identify BMPs which are in need of improvement in regards to air
                        emissions to achieve sufficient air emission prevention.
      Inspection Summary: The inspection began with Gary Pruitt introducing the inspectors Mark
                          Edler and Teresa Coons, and giving a brief overview of the pilot project and inspection goals.
                          Mark proceeded with the in-brief by explaining to the dairy owner, Tom Devries, how the
                          inspection would progress from start to finish. After the necessary information was gathered, Tom led the inspectors on a tour of his facility.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management:
      2.1.2 Feed Management:
2.1.3 Housing – Drylot Pens:

2.1.4 Manure Management:

2.1.6 Road Maintenance:

2.1.7 Milk Parlor & Holding Area:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:
2.2.2 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator  

2.2.3 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator  

2.2.4 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator  

3. Recommendations:  

3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator  

3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator  

3.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator  

3.4 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator  

3.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator  

4. BMP Implementation Determination  

4.1 Inspector Determination  
This determination is based on the following actions:  
- Review of Dairy AQMP  
- On Site Inspection, including (check each aspect inspected):  
  - On-site record keeping;  
  - Best Management Practices being implemented;  

Inspector Certification:  
- Based on the above actions, I find:  
  - ☑ No additional information needed.  
  - ☐ Additional information requested.  
  - ☐ The Dairy was unable to provide adequate information for a full inspection.  

Mark Edler - Inspector       Date Inspected

4.2 Engineer Determination  
This determination is based on the following actions:  
- Review of Dairy AQMP  
- Review of records on-site  
- Review of inspection notes
Engineer Certification:
• Based on the above actions, I find:
  ✓ All BMPs listed in the AQMP were confirmed on inspection.
  □ Another inspection is necessary to confirm implementation of BMPs.
  □ One or more BMPs need immediate attention due to the current system conditions.

________________________________________________________________________

Teresa Coons - Engineer

Date Inspected
June 22, 2011

Thomas DeVries  
Dairy Owner  
DeVries Family Farm  
15720 State Route 24  
Moxee, WA 98936


Mr. DeVries:

On May 11, 2011 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Plan (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project. The evaluation consisted of an on-site inspection to determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement. A copy of the inspection report is enclosed for your review.

If you have any questions please feel free to contact me at 834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons  
Engineer/Planner

Cc   Gary W. Pruitt

encl
October 24, 2011

Adam Dolsen
Cow Palace Dairy Owner
301 North 3rd Street
Yakima, WA 98901

RE: Air Quality Best Management Practices (BMP) Score Sheet

Dear Mr. Dolsen:

As part of the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project a score sheet was prepared which critically examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included are the revisions that have been made to the site visit report dated June 24, 2011, as well as the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons
Engineer/Planner

Cc Keith Hurley, Compliance Division Supervisor
Encl.
1. General Information:

1.1 Facility
Dairy Name: Cow Palace Dairy
Mailing Address: 1636 N Liberty Road, Granger, WA 98932
Facility Location: 1631 & 1632 N Liberty Road, Granger, WA 98932
Contact Name: Adam Dolsen and Jeff Boivin

1.2. Inspection
Date and Time of Inspection: 5/17/11 at 9:00 AM
YRCAA Inspectors: Mr. Mark Edler and Ms. Teresa Coons
Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Pilot Project purposes.
Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.
Inspection Summary: The inspection began with Mark Edler introducing the inspection team, and giving a brief overview of the pilot project and inspection goals. Mark proceeded with the in-brief by explaining to the dairy owner, Adam Dolsen, how the inspection would progress from start to finish.

2. Specific Information
2.1 Description of Systems Inspected:
2.1.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.3 Milk Parlor & Holding Area:

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.4 Housing – Drylot Pens:

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.5 Manure Management:

RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.6 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

2.1.7 Road Maintenance: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

2.2 Major Air Emissions Sources:
2.2.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

2.2.2 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

2.2.3 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

2.2.4 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

3. Recommendations:
3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

3.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

3.4 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

3.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.

4. BMP Implementation Determination
4.1 Inspector Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  ✅ On-site record keeping;
  ✅ Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  ✅ No additional information needed.
  ☐ Additional information requested.
  ☐ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector
Date Inspected

4.2 Engineer Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:
- Based on the above actions, I find:
  ✅ All BMPs listed in the AQMP were confirmed on inspection.
  ☐ Another inspection is necessary to confirm implementation of BMPs.
  ☐ One or more BMPs need immediate attention due to the current system conditions.

Teresa Coons - Engineer
Date Inspected
1. General Information:
   Dairy Name: Cow Palace Dairy
   Mailing Address: 301 N 3rd St, Yakima, WA 98901
   Facility Location: 1631 & 1632 N Liberty Road, Granger, WA 98932
   Contact Name: Adam Dolsen and Jeff Boivin
   Date and Time of Visit: 10/12/11 at 11:00 AM
   YRCAA Inspectors: Mr. Mark Edler and Ms. Teresa Coons

A second visit to Cow Palace Dairy and further discussion with the farm manager and nutritionist, led YRCAA to revise sections 2.2 Major Air Emissions Sources and 3.0 Recommendations of the Site Visit Report dated June 24, 2011. The revised sections are provided below:

2.2 Major Air Emissions Sources:
   2.2.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
   2.2.2 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
   2.2.3 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
   2.2.4 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Recommendations:
The following are not requirements rather they are recommendations for altering current best management practices in order to further reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive and/or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in the attached Air Quality BMP Selection Matrix document. This may be used to help determine which BMP recommendations to implement first. YRCAA recommends implementation of the following BMPs in order to achieve further reductions of air emissions:

   3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

   3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
3.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.4 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
4. BMP Implementation Determination

4.1 Inspector Determination
This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - ✓ No additional information needed.
  - □ Additional information requested.
  - □ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector

4.2 Engineer Determination
This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - ✓ On-site record keeping;
  - ✓ Best Management Practices being implemented;
- Review of inspection notes

Engineer Certification:
- Based on the above actions, I find:
  - ✓ All BMPs listed in the AQMP were confirmed on inspection.
  - □ Another inspection is necessary to confirm implementation of BMPs.
  - □ One or more BMPs need immediate attention due to the current system conditions.

Teresa Coons - Engineer
June 24, 2011

Adam Dolsen
Cow Palace Dairy Owner
301 North 3rd Street
Yakima, WA 98901


Mr. Dolsen:

On May 17, 2011 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Plan (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project. The evaluation consisted of an on-site inspection and review of your facility’s AQMP. The goal of the evaluation was to determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention. A copy of the inspection report is enclosed for your review.

If you have any questions please feel free to contact me at 834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons
Engineer/Planner

Cc Gary W. Pruitt

encl
October 24, 2011

Bill Wavrin, Owner  
Sunny Dene Ranch, LLC  
1675 Boundary Road  
Mabton, WA 98935

RE: Air Quality Best Management Practices (BMP) Score Sheet

Dear Mr. Wavrin:

As part of the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project a score sheet was prepared which critically examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons  
Engineer/Planner

Cc Keith Hurley, Compliance Division Supervisor
Encl.
1. General Information:
   1.1 Facility
   Dairy Name: Sunny Dene Ranch LLC
   Mailing Address: 1675 Boundary Road, Mabton, WA 98935
   Facility Location: 2501, 1671 & 1675 Boundary Road, Mabton, WA 98935
   Contact Name: Bill Wavrin

1.2. Inspection
   Date and Time of Inspection: 5/25/11 at 1:00 PM
   YRCAA Inspectors: Mr. Mark Edler and Ms. Teresa Coons
   Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Pilot Project purposes.
   Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.
   Inspection Summary: The inspection began by Gary Pruitt introducing the inspection team, and giving a brief overview of the pilot project and inspection goals. Mark proceeded with the in-brief by explaining to the dairy owner, Bill Wavrin, how the inspection would progress from start to finish.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management:

      2.1.2 Feed Management:
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Freestall/Flush Pens:

2.1.5 Housing – Drylot Pens:

2.1.6 Manure Management:
2.1.7 Land Application:

2.1.8 Road Maintenance:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Housing – Freestall Pens:

2.2.3 Housing – Drylot Pens:

2.2.4 Manure Management:

2.2.5 Land Application:

3. Recommendations:
The following are not requirements rather they are recommendations for altering current best management practices in order to reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix A. This may be used to help determine which BMP recommendations to implement first.
3.1 Nutrition Management: 

3.2 Feed Management: 

3.3 Housing – Freestall/Flush pens: 

3.4 Housing – Drylot Pens: 

3.5 Manure Management: 

3.6 Land Application: 

3.7 Other: 

4. BMP Implementation Determination 

4.1 Inspector Determination 

This determination is based on the following actions: 

- Review of Dairy AQMP 
- On Site Inspection, including (check each aspect inspected): 
  - On-site record keeping; 
  - Best Management Practices being implemented; 

Inspector Certification: 

- Based on the above actions, I find: 
  - No additional information needed. 
  - Additional information requested. 
  - The Dairy was unable to provide adequate information for a full inspection. 

Mark Edler - Inspector Date Inspected

4.2 Engineer Determination 

This determination is based on the following actions: 

- Review of Dairy AQMP 
- Review of records on-site 
- Review of inspection notes
Engineer Certification:

- Based on the above actions, I find:
  - ✔ All BMPs listed in the AQMP were confirmed on inspection.
  - ☐ Another inspection is necessary to confirm implementation of BMPs.
  - ☐ One or more BMPs need immediate attention due to the current system conditions.

____________________________________  ______________________________
Teresa Coons - Engineer                  Date Inspected
August 9, 2011

Bill Wavrin, Owner
Sunny Dene Ranch LLC
1675 Boundary Road
Mabton, WA 98935


Mr. Wavrin:

On May 25, 2011 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Plan (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project. The evaluation consisted of an on-site inspection and review of your facility’s AQMP. The goal of the evaluation was to determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention. A copy of the inspection report is enclosed for your review.

If you have any questions please feel free to contact me at 834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons
Engineer/Planner

Cc Keith Hurley, Compliance Division Supervisor
Encl.
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:
   1.1 Facility
   Dairy Name: Mensonides Dairy
   Mailing Address: 305 South Fisher Road, Mabton, WA 98935
   Facility Location: 305 South Fisher Road, Mabton, WA 98935
   Contact Name: Art Mensonides or Stuart (Stu) Turner

1.2. Inspection
   Date and Time of Inspection: 6/2/11 & 10/11/11 at 9:00 AM
   YRCAA Inspectors: Mr. Mark Edler and Ms. Teresa Coons
   Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Pilot Project purposes.
   Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.
   Inspection Summary: The inspection began with Mark Edler introducing the inspection team and giving a brief overview of the pilot project and inspection goals. Mark proceeded with the in-brief by explaining to the agronomic consultant, Stuart Turner, how the inspection would progress from start to finish.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management:
      2.1.2 Feed Management:
      2.1.3 Milk Parlor & Holding Area:
2.1.4 Housing – Freestall/Flush Pens: RCW 70.94.205. Information relating to processes or production unique to the owner or operator.

2.1.5 Housing – Drylot Pens: RCW 70.94.205. Information relating to processes or production unique to the owner or operator.

2.1.6 Manure Management: RCW 70.94.205. Information relating to processes or production unique to the owner or operator.

2.1.7 Land Application: RCW 70.94.205. Information relating to processes or production unique to the owner or operator.

2.1.8 Road Maintenance: RCW 70.94.205. Information relating to processes or production unique to the owner or operator.

2.2 Major Air Emissions Sources:

2.2.1 Freestall Pens: RCW 70.94.205. Information relating to processes or production unique to the owner or operator.

2.2.2 Manure Management: RCW 70.94.205. Information relating to processes or production unique to the owner or operator.
3. **Recommendations:**

The following are not requirements rather they are recommendations for altering current best management practices in order to further reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive and/or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix A. This may be used to help determine which BMP recommendations to implement first. YRCAA recommends implementation of the following BMPs in order to achieve further reductions of air emissions:

- **3.1 Nutrition Management:**
- **3.2 Feed Management:**
- **3.3 Milk Parlor & Holding Area:**
- **3.4 Housing – Freestall/Flush pens:**
- **3.5 Housing – Drylot Pens:**
- **3.6 Manure Management:**
- **3.7 Land Application:**

4. **BMP Implementation Determination**

4.1 **Inspector Determination**

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - [ ] On-site record keeping;
  - [x] Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - [ ] No additional information needed.
  - [x] Additional information requested.
  - [ ] The Dairy was unable to provide adequate information for a full inspection.

---

Mark Edler - Inspector  
Date Inspected
4.2 Engineer Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:

- Based on the above actions, I find:
  - ☐ All BMPs listed in the AQMP were confirmed on inspection.
  - ✓ Further information is necessary to confirm implementation of BMPs identified in the AQMP submitted.
  - ☐ One or more BMPs need immediate attention due to the current system conditions.

________________________________________  ________________________________
Teresa Coons - Engineer                      Date Inspected
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:
   1.1 Facility
   Dairy Name: DeRuyter Brothers Dairy 1 & 2
   Mailing Address: 5111 Van Belle Road, Outlook, WA 98938
   Facility Location: P.O. Box 338, Outlook, WA 98938
   Contact Name: Jake & Genny DeRuyter

   1.2. Inspection
   Date and Time of Inspection: 6/15/11 at 9:00 AM
   YRCAA Inspectors: Mr. Mark Edler and Ms. Teresa Coons
   Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Pilot Project purposes.
   Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.
   Inspection Summary: The inspection began with Mark Edler introducing the inspection team and giving a brief overview of the pilot project and inspection goals. Mark proceeded with the in-brief by explaining to Jake and Genny, how the inspection would progress from start to finish.

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management: RCW 70.94.205. Information relating to processes or production unique to the owner or operator

   2.1.2 Feed Management: RCW 70.94.205. Information relating to processes or production unique to the owner or operator

   RCW 70.94.205. Information relating to processes or production unique to the owner or operator

   RCW 70.94.205. Information relating to processes or production unique to the owner or operator

   RCW 70.94.205. Information relating to processes or production unique to the owner or operator

   RCW 70.94.205. Information relating to processes or production unique to the owner or operator

   RCW 70.94.205. Information relating to processes or production unique to the owner or operator
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Freestall/Flush Pens:

2.1.5 Housing – Drylot Pens:

2.1.6 Manure Management:

2.1.7 Land Application:

2.1.8 Road Maintenance:

2.2 Major Air Emissions Sources:

2.2.1 Housing – Freestall Pens:
2.2.2 Housing – Drylot Pens: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

2.2.3 Manure Management: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

2.2.4 Land Application: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

3. Recommendations:

The following are not requirements rather they are recommendations for altering current best management practices in order to further reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive and/or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix A. This may be used to help determine which BMP recommendations to implement first. YRCAA recommends implementation of the following BMPs in order to achieve further reductions of air emissions:

3.1 Nutrition Management: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

3.2 Feed Management: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

3.3 Housing – Freestall/Flush pens: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

3.4 Housing – Drylot Pens: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

3.5 Manure Management: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

3.6 Land Application: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

3.7 Other: [RCW 70.94.205, Information relating to processes or production unique to the owner or operator]

4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - ☑️ On-site record keeping;
  - ☑️ Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - ☑️ No additional information needed.
  - ☐ Additional information requested. 
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector                     Date Inspected
4.2 Engineer Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:

- Based on the above actions, I find:
  - ☑ All BMPs listed in the AQMP were confirmed on inspection.
  - □ Another inspection is necessary to confirm implementation of BMPs.
  - □ One or more BMPs need immediate attention due to the current system conditions.

______________________________  ____________________________
Teresa Coons - Engineer          Date Inspected
September 12, 2011  

Jake & Genny DeRuyter, Owners  
DeRuyter Brothers Dairy 1 & 2  
P.O. Box 338  
Outlook, WA  98938  


Dear Mr. & Mrs. DeRuyter:  

On June 15, 2011 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Plan (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project. The evaluation consisted of an on-site inspection and review of your facility’s AQMP. The goal of the evaluation was to determine whether the BMPs listed in the AQMP are sufficient to achieve maximum air emission prevention. A copy of the inspection report is enclosed for your review.  

If you have any questions please feel free to contact me at 834-2050, ext. 107 or Hasan Tahat at ext. 105.  

Sincerely,  

Teresa Coons  
Engineer/Planner  

Cc  Keith Hurley, Compliance Division Supervisor  
Encl.
October 24, 2011

Bill Scheenstra, Owner
Sun Valley Dairy, LLC
P.O. Box 689
Sunnyside, WA 98944

RE: Air Quality Best Management Practices (BMP) Score Sheet

Dear Mr. Scheenstra:

As part of the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project a score sheet was prepared which critically examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons
Engineer/Planner

Cc Keith Hurley, Compliance Division Supervisor
Encl.
1. General Information:
   1.1 Facility
   Dairy Name: Sun Valley Dairy LLC
   Mailing Address: P.O. Box 689, Sunnyside, WA 98944
   Facility Location: 2850 Alexander Road & 340 Den Boer Road, Sunnyside, WA 98944
   Contact Name: Bill Scheenstra

   1.2 Inspection
   Date and Time of Inspection: 6/28/11 at 9:00 AM
   YRCAA Inspectors: Mr. Mark Edler and Ms. Teresa Coons
   Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Pilot Project purposes.
   Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.
   Inspection Summary: The inspection began with the inspection team introducing themselves, and giving a brief overview of the pilot project and inspection goals. Teresa proceeded with the in-brief by explaining to the dairy owner, Bill Scheenstra, how the inspection would progress from start to finish. Teresa asked if Bill had a feeds consultant and if YRCAA could contact him for nutrition management information.

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.
   2.1.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator.
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Drylot Pens:

2.1.5 Manure Management:
2.1.6 Land Application: 

2.1.7 Road Maintenance: 

2.2 Major Air Emissions Sources:

2.2.1 Feed Management: 

2.2.2 Housing – Drylot Pens: 

2.2.3 Manure Management: 

2.2.4 Land Application: 

2.2.5 Other: 

3. Recommendations:

The following are not requirements rather they are recommendations for altering current best management practices in order to further reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive and/or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix A. This may be used to help determine which BMP recommendations to implement first.

YRCAA recommends implementation of the following BMPs in order to achieve further reductions of air emissions:

3.1 Nutrition Management: 

3.2 Feed Management: 

3.3 Housing – Drylot Pens: 

3.4 Manure Management:
4. BMP Implementation Determination

4.1 Inspector Determination
This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - ☑ No additional information needed.
  - □ Additional information requested.
  - □ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector         Date Inspected

4.2 Engineer Determination
This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:
- Based on the above actions, I find:
  - ☑ All BMPs listed in the AQMP were confirmed on inspection.
  - □ Another inspection is necessary to confirm implementation of BMPs.
  - □ One or more BMPs need immediate attention due to the current system conditions.

Teresa Coons - Engineer         Date Inspected
September 12, 2011

Bill Scheenstra, Owner
Sun Valley Dairy, LLC
P.O. Box 689
Sunnyside, WA  98944


Dear Mr. Scheenstra:

On June 28, 2011 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Plan (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project. The evaluation consisted of an on-site inspection and review of your facility’s AQMP. The goal of the evaluation was to determine whether the BMPs listed in the AQMP are sufficient to achieve maximum air emission prevention. A copy of the inspection report is enclosed for your review.

If you have any questions please feel free to contact me at 834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons
Engineer/Planner

Cc   Keith Hurley, Compliance Division Supervisor
Encl.
October 24, 2011

Tony Veiga, Owner
Tony Veiga Dairy
7010 East Edison Road
Sunnyside, WA  98944

RE:  Air Quality Best Management Practices (BMP) Score Sheet

Dear Mr. Veiga:

As part of the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project a score sheet was prepared which critically examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons
Engineer/Planner

Cc Keith Hurley, Compliance Division Supervisor
Encl.
1. General Information:

1.1 Facility

**Dairy Name:** Tony Veiga Dairy, J&K Dairy  
**Mailing Address:** 7010 East Edison Road, Sunnyside, WA 98944  
**Facility Location:** 7010 East Edison Road & 6154 Sheller Road, Sunnyside, WA 98944  
**Contact Name:** Tony Veiga and Jason Scheehan

1.2. Inspection

**Date and Time of Inspection:** 7/7/11 at 10:00 AM  
**YRCAA Inspectors:** Mr. Mark Edler and Ms. Teresa Coons

**Inspection Rationale:** To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Pilot Project purposes.

**Inspection Goals:** To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.

**Inspection Summary:** The inspection began with the inspection team introducing themselves, and giving a brief overview of the pilot project and inspection goals. Teresa proceeded with the in-brief by explaining to the dairy owner, Tony Veiga, how the inspection would progress from start to finish.

2. Specific Information

2.1 Description of Systems Inspected:

2.1.1 Nutrition Management:  

2.1.2 Feed Management:
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Freestall/Flush Pens:

2.1.5 Housing – Drylot Pens:

2.1.6 Manure Management:

2.1.7 Land Application:
2.1.8 Road Maintenance:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Housing – Freestall Pens:

2.2.3 Housing – Drylot Pens:

2.2.4 Manure Management:

3. Recommendations:

The following are not requirements rather they are recommendations for altering current best management practices in order to further reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive and/or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix A. This may be used to help determine which BMP recommendations to implement first. YRCAA recommends implementation of the following BMPs in order to achieve further reductions of air emissions:

3.1 Nutrition Management:

3.2 Feed Management:

3.3 Housing – Freestall Pens:

3.4 Housing – Drylot Pens:

3.5 Manure Management:

3.6 Land Application:
4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - ✔ On-site record keeping;
  - ✔ Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - ✔ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector

Date Inspected

4.2 Engineer Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:

- Based on the above actions, I find:
  - ✔ All BMPs listed in the AQMP were confirmed on inspection.
  - ☐ Another inspection is necessary to confirm implementation of BMPs.
  - ☐ One or more BMPs need immediate attention due to the current system conditions.

Teresa Coons - Engineer

Date Inspected
September 12, 2011

Tony Veiga, Owner  
Tony Veiga Dairy  
7010 East Edison Road  
Sunnyside, WA  98944


Dear Mr. Veiga:

On July 7, 2011 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Plan (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project. The evaluation consisted of an on-site inspection and review of your facility’s AQMP. The goal of the evaluation was to determine whether the BMPs listed in the AQMP are sufficient to achieve maximum air emission prevention. A copy of the inspection report is enclosed for your review.

If you have any questions please feel free to contact me at 834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons  
Engineer/Planner

Cc  Keith Hurley, Compliance Division Supervisor  
Encl.
October 24, 2011

Dan DeRuyter, Owner
George DeRuyter & Sons Dairy
P.O. Box 446
Outlook, WA  98938

RE:  Air Quality Best Management Practices (BMP) Score Sheet

Dear Mr. DeRuyter:

On July 12 and September 29, 2011 this office conducted BMP inspections of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project. The evaluation consisted of two on-site inspections and review of your facility’s AQMP. The goal of the evaluation was to determine whether the BMPs listed in the AQMP are sufficient to achieve maximum air emission prevention. An inspection report and a score sheet were prepared which critically examine the best management practices that were observed at your facility. These documents highlight areas of strength and weakness in terms of air emission reductions at your facility. A copy of the inspection report and score sheet are enclosed for your review. Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons
Engineer/Planner

Cc Keith Hurley, Compliance Division Supervisor
Encl.
1. General Information:
   1.1 Facility
      Dairy Name: George DeRuyter and Sons Dairy  
      Mailing Address: 5121 Dekker Road, Outlook, WA  98938  
      Facility Location: 5121 Dekker Road & 3001 Dekker Road, Outlook, WA  98938  
      Contact Name: Dan DeRuyter  
   1.2. Inspection
      Date and Time of Inspection: 7/12/11 & 9/29/11 at 9:00 AM  
      YRCAA Inspectors: Mr. Mark Edler and Ms. Teresa Coons  
      Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Pilot Project purposes.  
      Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.  
      Inspection Summary: Mark began the inspection by introducing the inspection team and giving a brief overview of the pilot project and inspection goals. Teresa proceeded with the in-brief by explaining to the dairy owner, Dan DeRuyter, how the inspection would progress from start to finish.  

2. Specific Information
   2.1 Description of Systems Inspected:  
      2.1.1 Nutrition Management:  
      2.1.2 Feed Management:
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Freestall/Flush Pens:

2.1.5 Housing – Drylot Pens:

2.1.6 Manure Management:
2.1.7 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.8 Road Maintenance: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2 Major Air Emissions Sources:

2.2.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.2 Housing – Freestall Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.4 Land application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.5 Other: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Recommendations:

The following are not requirements rather they are recommendations for altering current best management practices in order to further reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in the attached Air Quality BMP Selection Matrix document. This may be used to help determine which BMP recommendations to implement first.

3.1 Nutrition Management

3.2 Feed Management:

3.3 Housing – Freestall/Flush pens:

3.4 Housing – Drylot Pens:

3.5 Manure Management:

3.6 Land Application:

3.7 Other: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - [x] On-site record keeping;
  - [x] Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - [x] No additional information needed.
  - [ ] Additional information requested.
  - [ ] The Dairy was unable to provide adequate information for a full inspection.

______________________________  ______________________________
Mark Edler - Inspector         Date Inspected

4.2 Engineer Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - [x] On-site record keeping;
  - [x] Best Management Practices being implemented;
- Review of inspection notes

Engineer Certification:

- Based on the above actions, I find:
  - [x] All BMPs listed in the AQMP were confirmed on inspection.
  - [ ] Another inspection is necessary to confirm implementation of BMPs.
  - [ ] One or more BMPs need immediate attention due to the current system conditions.

______________________________  ______________________________
Teresa Coons - Engineer         Date Inspected
May 20, 2016

DenBoer Dairy LLC
C/o Fransisca Vander Meulen
650 Hornby Road
Grandview, WA 98930

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) Evaluation

Ms. Vander Meulen:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on May 9, 2016. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 108.

Dustin Harrington
Compliance Inspector

Encl: Site Visit Report
   Score Sheet
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:

1.1 Facility
Dairy Name: DenBoer Dairy LLC
Mailing Address: 650 Hornby Road, Grandview, WA 98930
Facility Location: 340 DenBoer Road, Grandview, WA 98930
Contact Name: Fransisca Vander Meulen

1.2. Inspection

Date and Time of Inspection: May 9, 2016 at 10:00 am
YRCAA Inspectors: Keith Hurley, Dustin Harrington

To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.

Inspection Goals:
A) To determine whether the BMPs listed in the DenBoer Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
B) Identify BMPs which can be improved in order to achieve reasonable air emission reduction/prevention.

Inspection Summary:
Ruurd Veldius met Keith and Dustin at the dairy on May 9, 2016 at 10:00am. DenBoer Dairy LLC bought and took control of the former Sun Valley Dairy LLC #2 in December of 2015. Keith reviewed the DenBoer Dairy LLC Air Quality Management Plan (AQMP) with Ruurd. Keith clarified for Ruurd how to complete sections 7 & 10 of the AQMP. He then asked Ruurd for feed ration data, lagoon pH testing data, soil testing data, and manure composting data. Ruurd provided the soil testing data but was unable to produce the rest of the information for review. He informed Keith that the remaining data would be emailed to him by the next week. Manure composting data would not be able to be provided from the contractor as the dairy had not had control of the new facility long enough for the composting to actually start.

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

Keith informed Ruurd that he needed to fill out a Backup Generator Registration form and a New Source Review (NSR) application, and submit both to the YRCAA Engineering Division for review. Keith also informed Ruurd that he could download both forms from the agency website.
2. Specific Information

2.1 Description of Systems Inspected:

2.1.1 Nutrition Management: [RCW 70.94.205...Information relating to processes or production unique to the owner or operator]

2.1.2 Feed Management: [RCW 70.94.205...Information relating to processes or production unique to the owner or operator]

2.1.3 Housing – Drylot Pens: [RCW 70.94.205...Information relating to processes or production unique to the owner or operator]

2.1.4 Manure Management: [RCW 70.94.205...Information relating to processes or production unique to the owner or operator]

2.1.5 Land Application: [RCW 70.94.205...Information relating to processes or production unique to the owner or operator]
2.1.6 Road Maintenance:

2.1.7 Milk Parlor & Holding Area:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Housing – Drylot Pens:

2.2.3 Manure Management:

2.2.4 Land Application:

2.2.5 Land Application:

3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is
found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:

<table>
<thead>
<tr>
<th>3.1 Nutrition Management:</th>
<th>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3.2 Housing – Drylot Pens:</th>
<th>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3.3 Manure Management:</th>
<th>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</th>
</tr>
</thead>
</table>
4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - No additional information needed.
  - Additional information requested.
  - The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Dustin Harrington
Compliance & Enforcement Division Field Agent

4.2 Compliance Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site

Compliance Certification:
- Based on the above actions, I find:
  - All BMPs listed in the AQMP were confirmed on inspection.
  - Additional information requested (lagoon pH).
  - Another inspection is necessary to confirm implementation of BMPs.
  - One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith Hurley
Compliance & Enforcement Division Supervisor
AQ BMP SCORE SHEET

Description of Score Sheet: Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). How to use this table:

1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2. Review the score (%) for each category (e.g., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH3)</th>
<th>Nitrous Oxide (N2O)</th>
<th>Hydrogen Sulfide (H2S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH4)</th>
<th>Oxides of Nitrogen (NOX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.1</td>
<td>Properly manage level of dietary protein (%CP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.2</td>
<td>Feed increased level or quality of starch in diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.4</td>
<td>Practice group and/or stage of lactation feeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category Level of BMP Implementation (%)</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>96</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>II. Feed Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.1</td>
<td>Properly manage ensiled feedstuffs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.2</td>
<td>Store feed in a sheltered storage structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.3</td>
<td>Regularly remove spilled and unused feed from feeding area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.4</td>
<td>Manage or minimize feed mixing during windy times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category Level of BMP Implementation (%)</td>
<td>93</td>
<td>NA</td>
<td>NA</td>
<td>95</td>
<td>94</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>III. Milk Parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.1</td>
<td>Ensure proper ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.2/3</td>
<td>Use recycled (clean) or treated water for flushing parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.2/3</td>
<td>Use recycled (clean) or treated water for cleaning holding pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.4</td>
<td>Remove manure from holding area frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category Level of BMP Implementation (%)</td>
<td>100</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IV. Housing - Freestall Barns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.1</td>
<td>Provide shade for cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.2</td>
<td>Siting of water trough within pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.3</td>
<td>(a) Remove manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.3</td>
<td>(b) Spread (harrow) manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.4</td>
<td>Use straw bedding in pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.5</td>
<td>Incorporate wood chips into surface layer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.6</td>
<td>Utilize urea inhibitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.7</td>
<td>Surface moisture content management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.8</td>
<td>Knock down and remove fence line manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category Level of BMP Implementation (%)</td>
<td>82</td>
<td>100</td>
<td>87</td>
<td>83</td>
<td>78</td>
<td>79</td>
<td>78</td>
<td>NA</td>
</tr>
<tr>
<td>V. Housing - Drylot Pens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.1</td>
<td>Provide shade for cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.2</td>
<td>Siting of water trough within pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.3</td>
<td>Remove manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.4</td>
<td>Use straw bedding in pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.5</td>
<td>Incorporate wood chips into surface layer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.6</td>
<td>Utilize urea inhibitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.7</td>
<td>Surface moisture content management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.8</td>
<td>Knock down and remove fence line manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category Level of BMP Implementation (%)</td>
<td>77</td>
<td>NA</td>
<td>110</td>
<td>#DIV/0!</td>
<td>82</td>
<td>100</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>VI. Grazing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.1</td>
<td>Manage solids - chemical separation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.1</td>
<td>Manure solids - settling basin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.2</td>
<td>Lagoon or storage covers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.3</td>
<td>Scrub exhaust of enclosed waste containers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.4</td>
<td>Install and properly maintain a methane digester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.5</td>
<td>Surface aeration of lagoons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.6</td>
<td>Reduce the pH of lagoons and manure piles below 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.7</td>
<td>Encourage purple sulfur bacterial formation in anaerobic lagoons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.8</td>
<td>Properly manage the composting of manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.9</td>
<td>Properly manage stockpiled manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category Level of BMP Implementation (%)</td>
<td>91</td>
<td>90</td>
<td>84</td>
<td>86</td>
<td>87</td>
<td>90</td>
<td>80</td>
<td>NA</td>
</tr>
<tr>
<td>VII. Manure Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.1</td>
<td>Apply N fertilizer below no-tille residue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.2</td>
<td>Inject fertilizer/manure into soil at application (corn)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.2/3</td>
<td>Incorporate fertilizer/manure into soil within 24 hours of application (forage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.3</td>
<td>Apply nutrients according to agronomic recommendations based on soil and manure test results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.4</td>
<td>Do not over-irrigate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.5</td>
<td>Utilize cover crops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.6</td>
<td>Apply during cool weather and on still rather than windy days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category Level of BMP Implementation (%)</td>
<td>91</td>
<td>90</td>
<td>84</td>
<td>86</td>
<td>87</td>
<td>90</td>
<td>80</td>
<td>NA</td>
</tr>
<tr>
<td>IX. Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IX.1</td>
<td>Installation of windbreaks or shelterbelts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IX.2</td>
<td>Vehicle road condition management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IX.3</td>
<td>Engine selection and efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category Level of BMP Implementation (%)</td>
<td>#DIV/0!</td>
<td>NA</td>
<td>#DIV/0!</td>
<td>NA</td>
<td>#DIV/0!</td>
<td>100</td>
<td>NA</td>
<td>60</td>
</tr>
</tbody>
</table>

Overall Level of BMP Effectivity by Pollutant (%)

- Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation).
- Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections.
- For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011).
- How to use this table:

  1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
  2. Review the score (%) for each category (e.g., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
  3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.
### 5-10-16 Low Cow Ration - Ingredient Detail

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>AF lb</th>
<th>DM lb</th>
<th>Ingredient DM Pct</th>
<th>Ration lb/ton AF</th>
<th>Ingredient AF $/ton</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5-10-16 Low Cow Ration - Nutrient Cost

|            |       |       |                   |                  |                     |

### 5-10-16 Low Cow Ration - Nutrient Amount

RCW 42.56.610...Certain information from dairies and feedlots limited to number of animals, volume of live stock, nutrients generated, number of acres covered.
Animal performance is not guaranteed by feeding of specific rations. Changes in composition of feeds, methods of feeding, environment, and general management will affect performance.
### AQ BMP SCORE SHEET

**Description of Score Sheet**: Scores entered in the gray boxes range from 0 to 5 for each pollutant (3 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). How to use this table:

1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2. Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrogen Oxide, etc.). The values listed in the “Category Level of BMP Implementation (%)” row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrogen Oxide (NOₓ)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>I. Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Properly manage level of dietary protein (%CP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Feed increased level or quality of starch in diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Practice group and/or stage of lactation feeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>5</td>
<td>Category Level of BMP Implementation (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>40</td>
<td>100</td>
<td>NA</td>
<td>57</td>
</tr>
<tr>
<td>2.1</td>
<td>II. Feed Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1</td>
<td>Properly manage ensiled feedstocks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.2</td>
<td>Store feed in a sheltered storage structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.3</td>
<td>Regularly remove spilled and unused feed from feeding area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.4</td>
<td>Manage or minimize feed mixing during windy times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>3.</td>
<td>III. Milk Parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Ensure proper ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Use recycled (clean) or treated water for flushing parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Use recycled (clean) or treated water for cleaning holding pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>4.</td>
<td>IV. Housing - Frensel Barns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Ensure proper ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Bedding selection and management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td>Treat recycled lagoon water used for flushing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4</td>
<td>Remove manure from barns frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5</td>
<td>Manure removal technology and efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.6</td>
<td>Alleyway floor texture and type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>76</td>
<td>60</td>
<td>87</td>
<td>65</td>
<td>77</td>
<td>71</td>
<td>70</td>
<td>NA</td>
</tr>
<tr>
<td>5.</td>
<td>V. Housing - Drylot Pens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Provide shade for cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>Sitting of water trough within pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.a</td>
<td>Remove manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.b</td>
<td>Spread (harrow) manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4</td>
<td>Use straw bedding in pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.5</td>
<td>Incorporate wood chips into surface layer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.6</td>
<td>Utilize urea inhibitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.7</td>
<td>Surface moisture content management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.8</td>
<td>Knock down and remove fence line manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>49</td>
<td>49</td>
<td>50</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>NA</td>
</tr>
<tr>
<td>6.</td>
<td>VI. Grazing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>Stock appropriate number of animals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2</td>
<td>Use rotational grazing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3</td>
<td>Move water and feeding areas frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.4</td>
<td>Irrigate immediately after grazing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>7.</td>
<td>VII. Manure Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1</td>
<td>Manure solids - mechanical separation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2</td>
<td>Manure solids - settling basin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.3</td>
<td>Lagoon or storage covers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.4</td>
<td>Scratch exhaust of enclosed waste containers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.5</td>
<td>Install and properly maintain a methane digester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.6</td>
<td>Reduce the pH of lagoons and manure piles to 6-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.7</td>
<td>Encourage purple sulfur bacterial formation in anaerobic lagoons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.8</td>
<td>Properly manage the composting of manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.9</td>
<td>Properly manage stockpiled manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>81</td>
<td>88</td>
<td>87</td>
<td>87</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>78</td>
</tr>
<tr>
<td>8.</td>
<td>VIII. Land Application - Manure or Chemical Fertilizer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.1</td>
<td>Apply N fertilizer below no-till residue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.a</td>
<td>Inject fertilizer/manure into soil at application (corn)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.b</td>
<td>Incorporate fertilizer/manure into soil within 24 hours of application (forage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.3</td>
<td>Apply nutrients according to agronomic recommendations based on soil and manure test results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.4</td>
<td>Do not over-irrigate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.5</td>
<td>Utilize cover crops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.6</td>
<td>Apply durnic cool weather and on still rather than windy days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>88</td>
<td>90</td>
<td>87</td>
<td>87</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>90</td>
</tr>
<tr>
<td>9.</td>
<td>IX. Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.1</td>
<td>Installation of windbreaks or shelterbelts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.2</td>
<td>Vehicle road condition management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.3</td>
<td>Engine selection and efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>NA</td>
<td>20</td>
<td>NA</td>
<td>20</td>
<td>56</td>
<td>NA</td>
<td>#DIV/0!</td>
</tr>
</tbody>
</table>

**Overall Level of BMP Effectiveness by Pollutant (%)**

- 87 | 90 | 83 | 90 | 86 | 80 | 72 |"
August 4, 2016

Double P Dairy  
C/o Aaron Prins  
1741 Holaday Road  
Mabton, WA 98935

Re: Double P Dairy. Evaluation Report

Mr. Prins:  
In accordance with the YRCAA Dairy Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of the Double P Dairy. Air Quality Management Plan (AQMP) on August 30, 2016. The purpose of the evaluation was to determine whether the Best Management Practices (BMPs) listed in the AQMP are implemented effectively, and to identify BMPs which can be improved in order to achieve reasonable air emission reductions/prevention.

A copy of the evaluation report and a score sheet are enclosed for your records. If you have any questions concerning the report please contact me at (509) 834-2050 ext. 108.

Dustin Harrington  
Dustin Harrington  
Compliance Inspector

Encl (2):  
Report  
Score Sheet
1. General Information:
   1.1 Facility
   Dairy Name: Double P Dairy
   Mailing Address: 1741 Holaday Road, Mabton, WA 98935
   Facility Location: 1741 Holaday Road, Mabton, WA 98935
   Contact Name: Aaron Prins

   1.2. Inspection
   Date and Time of Inspection: August 30, 2016 at 9:30 AM
   YRCAA Inspectors: Keith Hurley, Dustin Harrington
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A) To determine whether the BMPs listed in the Double P Dairy Air Quality Management Plan (AQMP) are implemented effectively.
   B) Identify BMPs which can be improved upon in order to achieve reasonable air emission reduction/prevention.
   Inspection Summary: Aaron Prins met Keith and Dustin at the facility on the date and time listed above. Keith reviewed the Double P Dairy Air Quality Management Plan with Aaron. He did inform Keith that he would send him the information as soon as his nutritionist could provide it.

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management:
   2.1.2 Feed Management:
   2.1.3 Milk Parlor & Holding Area:
2.1.4 Housing – Drylot Pens:

2.1.5 Manure Management:

2.1.6 Land Application:

2.1.7 Road Maintenance:
2.2 Major Air Emissions Sources:

2.2.1 Feed Management: [information]

2.2.2 Nutrition Management: [information]

2.2.3 Milk Parlor & Holding Area: [information]

2.2.4 Housing – Drylot Pens: [information]

2.2.5 Manure Management: [information]

2.2.6 Land Application: [information]

2.2.7 Road Maintenance: [information]

3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing an air pollutant, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:

3.1 Feed Management: [information]
3.2 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.3 Milk Parlor & Holding Area: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.4 Housing-Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.5 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
3.6 Land Application: RCW 70.94.205... Information relating to processes or production unique to the owner or operator

3.7 Road Maintenance: RCW 70.94.205... Information relating to processes or production unique to the owner or operator
4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - ☑ No additional information needed.
  - □ Additional information requested.
  - □ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Dustin Harrington
Compliance & Enforcement Division Field Agent
Date September 13, 2016

4.2 Compliance Determination:

This determination is based on the following actions:

- ☑ Review of Dairy AQMP
- ☑ Review of records on-site
- ☑ Review of Best Management Practices being implemented

Compliance Certification:

Based on the above actions, I find:

- ☑ All BMPs listed in the AQMP were confirmed on inspection.
- □ Additional information requested.
- □ Another inspection is necessary to confirm implementation of BMPs.
- □ One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith Hurley
Compliance & Enforcement Division Supervisor
Date September 13, 2016
August 3, 2016

Familia Salazar Dairy
C/o Arturo Perez Salazar
1070 Bus Road,
Mabton, WA 98935

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) Evaluation

Mr. Salazar:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on May 9, 2016. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 108.

Dustin Harrington
Dustin Harrington
Compliance Inspector

Encl: Site Visit Report
Score Sheet
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:

1.1 Facility

- **Dairy Name:** Familia Salazar Dairy
- **Mailing Address:** 1070 Bus Road, Mabton, WA 98935
- **Facility Location:** 1070 Bus Road, Mabton, WA 98935
- **Contact Name:** Arturo Perez Salazar

1.2. Inspection

- **Date and Time of Inspection:** July 27, 2016 @10:00am
- **YRCAA Inspectors:** Keith Hurley, Dustin Harrington
- **Inspection Rationale:** To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.

**Inspection Goals:**

- **A.** To determine whether the BMPs listed in the Familia Salazar Dairy Air Quality Management Plan (AQMP) are implemented effectively.
- **B.** Identify BMPs which can be improved in order to achieve reasonable air emission reduction/prevention.

**Inspection Summary:** Arturo Salazar met Keith and Dustin at the facility at 10 am on the date above. Mr. Salazar led everyone into a small house at the facility for the in-brief. Keith reviewed the Familia Salazar Dairy Air Quality Management Plan (AQMP) with Mr. Salazar. He reviewed section 7 of the AQMP with Mr. Salazar and advised him on how to complete it for the 2017 registration period. Mr. Salazar informed Keith that he is trying to sell the dairy, and Keith asked him to inform the agency if he gets an offer to sell.

2. Specific Information

2.1 Description of Systems Inspected:

- **2.1.1 Nutrition Management:**
- **2.1.2 Feed Management:**
- **2.1.3 Housing – Freestall/ Scrape Pens:**
2.1.4 Housing – Drylot Pens:

2.1.5 Manure Management:

2.1.6 Land Application:

2.1.7 Road Maintenance:

2.1.8 Milk Parlor & Holding Area:

2.2 Major Air Emissions Sources:

2.2.1 Nutrition Management:

2.2.2 Feed Management:
2.2.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.4 Housing – Freestall Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.5 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.6 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.7 Parlor & Holding Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:

3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.3 Housing – Freestall/Scrape: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
3.4 Housing – Drylot Pens: Information relating to processes or production unique to the owner or operator.

3.5 Manure Management: Information relating to processes or production unique to the owner or operator.

3.6 Land Application: Information relating to processes or production unique to the owner or operator.
4. BMP Implementation Determination

4.1 Inspector Determination
This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - [x] On-site record keeping;
  - [x] Best Management Practices being implemented:

Inspector Certification:
- Based on the above actions, I find:
  - [x] No additional information needed.
  - [ ] Additional information requested.
  - [ ] The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Compliance & Enforcement Division Field Agent

4.2 Compliance Determination:
This determination is based on the following actions:
- [x] Review of Dairy AQMP
- [x] Review of records on-site
- [x] Review of Best Management Practices being implemented

Compliance Certification:
Based on the above actions, I find:
- [x] All BMPs listed in the AQMP were confirmed on inspection.
- [ ] Additional information requested.
- [ ] Another inspection is necessary to confirm implementation of BMPs.
- [ ] One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Compliance & Enforcement Division Supervisor

Dustin Harrington
Date August 3, 2016

Keith Hurley
Date August 3, 2016
## AQ BMP Score Sheet

**Description of Score Sheet:** Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011).

### How to use this table:
1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2. Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

### Table: AQ BMP Score Sheet

<table>
<thead>
<tr>
<th>Overall Score (%) &amp; Grade:</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>B</td>
<td>100-90%</td>
<td>89-80%</td>
<td>79-70%</td>
<td>69-60%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (CP)</td>
<td>100</td>
<td>100</td>
<td>90</td>
<td>60</td>
<td>96</td>
<td>NA</td>
<td>71</td>
<td>NA</td>
</tr>
<tr>
<td>I.2</td>
<td>Feed increased level or quality of starch in diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.4</td>
<td>Practice group and/or stage of lactation feeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Category Level of BMP Implementation (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>I. Nutrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.1</td>
<td>100</td>
</tr>
<tr>
<td>I.2</td>
<td>100</td>
</tr>
<tr>
<td>I.3</td>
<td>90</td>
</tr>
<tr>
<td>I.4</td>
<td>60</td>
</tr>
<tr>
<td>I.5</td>
<td>96</td>
</tr>
<tr>
<td>I.6</td>
<td>NA</td>
</tr>
<tr>
<td>I.7</td>
<td>NA</td>
</tr>
<tr>
<td>I.8</td>
<td>NA</td>
</tr>
</tbody>
</table>

### II. Feed Management

<table>
<thead>
<tr>
<th>Category</th>
<th>II. Feed Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.1</td>
<td>100</td>
</tr>
<tr>
<td>II.2</td>
<td>100</td>
</tr>
<tr>
<td>II.3</td>
<td>90</td>
</tr>
<tr>
<td>II.4</td>
<td>60</td>
</tr>
<tr>
<td>II.5</td>
<td>96</td>
</tr>
<tr>
<td>II.6</td>
<td>NA</td>
</tr>
<tr>
<td>II.7</td>
<td>NA</td>
</tr>
<tr>
<td>II.8</td>
<td>NA</td>
</tr>
</tbody>
</table>

### III. Milk Parlor

<table>
<thead>
<tr>
<th>Category</th>
<th>III. Milk Parlor</th>
</tr>
</thead>
<tbody>
<tr>
<td>III.1</td>
<td>100</td>
</tr>
<tr>
<td>III.2</td>
<td>100</td>
</tr>
<tr>
<td>III.3</td>
<td>90</td>
</tr>
<tr>
<td>III.4</td>
<td>60</td>
</tr>
<tr>
<td>III.5</td>
<td>96</td>
</tr>
<tr>
<td>III.6</td>
<td>NA</td>
</tr>
<tr>
<td>III.7</td>
<td>NA</td>
</tr>
<tr>
<td>III.8</td>
<td>NA</td>
</tr>
</tbody>
</table>

### IV. Housing - Freestall Barns

<table>
<thead>
<tr>
<th>Category</th>
<th>IV. Housing - Freestall Barns</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV.1</td>
<td>100</td>
</tr>
<tr>
<td>IV.2</td>
<td>100</td>
</tr>
<tr>
<td>IV.3</td>
<td>100</td>
</tr>
<tr>
<td>IV.4</td>
<td>100</td>
</tr>
<tr>
<td>IV.5</td>
<td>100</td>
</tr>
<tr>
<td>IV.6</td>
<td>100</td>
</tr>
<tr>
<td>IV.7</td>
<td>100</td>
</tr>
<tr>
<td>IV.8</td>
<td>100</td>
</tr>
</tbody>
</table>

### V. Housing - Drylot Pens

<table>
<thead>
<tr>
<th>Category</th>
<th>V. Housing - Drylot Pens</th>
</tr>
</thead>
<tbody>
<tr>
<td>V.1</td>
<td>86</td>
</tr>
<tr>
<td>V.2</td>
<td>100</td>
</tr>
<tr>
<td>V.3</td>
<td>90</td>
</tr>
<tr>
<td>V.4</td>
<td>90</td>
</tr>
<tr>
<td>V.5</td>
<td>88</td>
</tr>
<tr>
<td>V.6</td>
<td>85</td>
</tr>
<tr>
<td>V.7</td>
<td>87</td>
</tr>
<tr>
<td>V.8</td>
<td>NA</td>
</tr>
</tbody>
</table>

### VI. Grazing Management

<table>
<thead>
<tr>
<th>Category</th>
<th>VI. Grazing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI.1</td>
<td>62</td>
</tr>
<tr>
<td>VI.2</td>
<td>105</td>
</tr>
<tr>
<td>VI.3</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>VI.4</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>VI.5</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>VI.6</td>
<td>NA</td>
</tr>
<tr>
<td>VI.7</td>
<td>NA</td>
</tr>
</tbody>
</table>

### VII. Manure Management

<table>
<thead>
<tr>
<th>Category</th>
<th>VII. Manure Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>VII.1</td>
<td>62</td>
</tr>
<tr>
<td>VII.2</td>
<td>105</td>
</tr>
<tr>
<td>VII.3</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>VII.4</td>
<td>72</td>
</tr>
<tr>
<td>VII.5</td>
<td>90</td>
</tr>
<tr>
<td>VII.6</td>
<td>85</td>
</tr>
<tr>
<td>VII.7</td>
<td>NA</td>
</tr>
<tr>
<td>VII.8</td>
<td>NA</td>
</tr>
</tbody>
</table>

### VIII. Land Application

<table>
<thead>
<tr>
<th>Category</th>
<th>VIII. Land Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIII.1</td>
<td>92</td>
</tr>
<tr>
<td>VIII.2</td>
<td>90</td>
</tr>
<tr>
<td>VIII.3</td>
<td>80</td>
</tr>
<tr>
<td>VIII.4</td>
<td>78</td>
</tr>
<tr>
<td>VIII.5</td>
<td>87</td>
</tr>
<tr>
<td>VIII.6</td>
<td>92</td>
</tr>
<tr>
<td>VIII.7</td>
<td>60</td>
</tr>
<tr>
<td>VIII.8</td>
<td>NA</td>
</tr>
</tbody>
</table>

### IX. Other

<table>
<thead>
<tr>
<th>Category</th>
<th>IX. Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>IX.1</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>IX.2</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>IX.3</td>
<td>#DIV/0!</td>
</tr>
</tbody>
</table>

### Overall Level of BMP Effectivity by Pollutant (%)

- Overall: 83%
- Ammonia: 94%
- Nitrous Oxide: 85%
- Hydrogen Sulfide: 81%
- Volatile Organic Compounds: 84%
- Odor: 89%
- Particulate Matter: 75%

**Note:** Certain information from this table may be subject to change due to updates in guidelines, changes in the stock, nutrient management, amount of acres covered, etc.
<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>I. Nutrition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Properly manage level of dietary protein (%CP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Feed increased level or quality of starch in diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Practice group and/or stage of lactation feeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>II. Feed Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Properly manage ensiled feedstuffs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Store feed in a sheltered storage structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Regularly remove spilled and unused feed from feeding area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Manage or minimize feed mixing during windy times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>III. Milk Parlor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ensure proper ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/3</td>
<td>Use recycled (clean) or treated water for flushing parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/3</td>
<td>Use recycled (clean) or treated water for cleaning holding pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IV. Housing - Freestall Barns</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ensure proper ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Bedding selection and management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Treat recycled lagoon water used for flushing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Remove manure from barns frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Manure removal technology and efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Alleyway floor texture and type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>V. Housing - Drylot Pens</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Provide shade for cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sitting of water trough within pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Remove manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 (a)</td>
<td>Remove mud frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 (b)</td>
<td>Spread (harrow) manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Use straw bedding in pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Incorporate wood chips into surface layer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Utilize urease inhibitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Surface moisture content management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Knock down and remove fence line manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>VI. Grazing Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Stock appropriate number of animals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Use rotational grazing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Move water and feeding areas frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Irrigate immediately after grazing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>VII. Manure Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Manure solids - mechanical separation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Manure solids - settling basin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Lagoon or storage covers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Scrub exhaust of enclosed waste containers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Install and properly maintain a methane digester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Surface aeration of lagoons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Reduce the pH of lagoons and manure piles below 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Encourage purple sulfur bacterial formation in anaerobic lagoons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Properly manage the composting of manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Properly manage stockpiled manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>VIII. Land Application - Manure or Chemical Fertilizer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Apply N fertilizer below no-till residue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2(a)</td>
<td>Inject fertilizer/manure into soil at application (corn)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2(b)</td>
<td>Incorporate fertilizer/manure into soil within 24 hours of application (forage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Apply nutrients according to agronomic recommendations based on soil and manure test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Do not over-irrigate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Utilize cover crops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Apply during cool weather and on still rather than windy days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IX. Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Installation of windbreaks or shelterbelts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Vehicle road condition management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Engine selection and efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Score (%) &amp; Grade:</th>
<th>Good</th>
<th>Adequate</th>
<th>Poor - Needs improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>90</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category Level of BMP Implementation (%)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia (NH₃)</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>Nitrous Oxide (N₂O)</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>Hydrogen Sulfide (H₂S)</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOCs)</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>Odor</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>Particulate Matter (PM)</td>
<td>NA</td>
<td>NA</td>
<td>95</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>Methane (CH₄)</td>
<td>NA</td>
<td>NA</td>
<td>95</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>Oxides of Nitrogen (NOₓ)</td>
<td>NA</td>
<td>NA</td>
<td>95</td>
<td>94</td>
<td>95</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BMP Category</th>
<th>BMP #</th>
<th>Overall Level of BMP Effectivity by Pollutant (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>91</td>
</tr>
</tbody>
</table>

**AQ BMP SCORE SHEET**

**Description of Score Sheet** - Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). How to use this table: 1) Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2) Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row give the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.
August 4, 2016

FRH Dairy, LLC.
C/o Francisca Vander Meulen
650 Hornby Road
Grandview, WA 98930

Re: FRH Dairy, LLC. Evaluation Report

Mrs. Vander Meulen:
In accordance with the YRCAA Dairy Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of the FRH Dairy, LLC. Air Quality Management Plan (AQMP) on August 3, 2016. The purpose of the evaluation was to determine whether the Best Management Practices (BMPs) listed in the AQMP are implemented effectively, and to identify BMPs which can be improved in order to achieve reasonable air emission reductions/prevention.

A copy of the evaluation report and a score sheet are enclosed for your records. If you have any questions concerning the report please contact me at (509) 834-2050 ext. 112.

Keith M. Hurley
Keith M. Hurley
Compliance & Enforcement Division Supervisor

Encl (2):
Report
Score Sheet
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:
   1.1 Facility
   Dairy Name: FRH Dairy LLC.
   Mailing Address: 650 Hornby Road, Grandview, WA 98930
   Facility Location: 2320 N. County Line Road, Grandview, WA 98930
   Contact Name: Fransisca Vander Meulen, Office Manager

1.2. Inspection
   Date and Time of Inspection: August 3, 2016 @ 9am
   YRCAA Inspectors: Keith Hurley, Dustin Harrington
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A. To determine whether the BMPs listed in the FRH Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
   B. Identify BMPs which can be improved in order to achieve reasonable air emission reduction/prevention.
   Inspection Summary: The in-brief was conducted at the Klompe Dairy Facility, with Ruurd Veldius and Fransisca Vander Meulen. Keith reviewed section 7, 8, & 9 of the FRH Dairy LLC Air Quality Management Plan with them. Ruurd purchased the FRH Dairy in August of 2015 and was making major changes to the facility. He informed Keith that there were no longer any Freestall Barns on site as they had been removed. He also informed Keith that all commodities for feed mixing are transported to the FRH Facility from Klompe Dairy’s new feed storage/mixing building. Feed is mixed at the FRH Facility once the commodities arrive. He then asked Ruurd for feed ration data, lagoon pH

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management:
2.1.2 Feed Management:

2.1.3 Housing - Drylot Pens:

RCW 70.94.205...Information relating to processes or production unique to the owner or operator.
### 2.1 BMPs

2.1.5 **Land Application:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

2.1.6 **Road Maintenance:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

2.1.7 **Milk Parlor & Holding Area:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

### 2.2 Major Air Emissions Sources:

2.2.1 **Nutrition Management:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

2.2.2 **Feed Management:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

2.2.3 **Housing:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

2.2.4 **Housing – Drylot Pens:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

2.2.5 **Manure Management:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

2.2.6 **Land Application:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]

2.2.7 **Parlor & Holding Pens:**

- [Link to RCW 70.94.205 Information relating to processes or production unique to the owner or operator]
### 3. Findings and recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:

<table>
<thead>
<tr>
<th>3.1 Nutrition Management:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.2 Feed Management:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.3 Housing – Drylot Pens:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.4 Manure Management:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</td>
</tr>
</tbody>
</table>
4. BMP Implementation Determination

4.1 Inspector Determination
This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - [x] On-site record keeping;
  - [x] Best Management Practices being implemented:

**Inspector Certification:**

Based on the above actions, I find:

- [x] No additional information needed.
- [ ] Additional information requested.
- [ ] The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Dustin Harrington
Lead Field Agent

4.2 Compliance Determination:
This determination is based on the following actions:

- [x] Review of Dairy AQMP
- [x] Review of records on-site
- [x] Review of Best Management Practices being implemented
**Compliance Certification:**
Based on the above actions, I find:

- ☑ All BMPs listed in the AQMP were confirmed on inspection.
- □ Additional information requested.
- □ Another inspection is necessary to confirm implementation of BMPs.
- □ One or more BMPs need immediate attention due to the current system conditions.

**Keith M. Hurley**
Keith Hurley
Compliance & Enforcement Division Supervisor
1. General Information:
   1.1 Facility
      Dairy Name: Golob Farms, LLC
      Mailing Address: 500 Nelson Rd. Granger, WA 98932
      Facility Location: 500 Nelson Rd. Granger, WA 98932
      Contact Name: Keith Golob

   1.2. Inspection
      Date and Time of Inspection: September 27, 2016 @ 9:30am
      YRCAA Inspectors: Keith Hurley, Dustin Harrington
      Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.

      Inspection Goals:
      A) To determine whether the BMPs listed in the Golob Farms LLC Air Quality Management Plan (AQMP) are implemented effectively.
      B) Identify BMPs which can be improved upon in order to achieve reasonable air emission reduction/prevention.

      Inspection Summary: Keith Golob met Keith and Dustin at the facility on the date and time listed above. Keith reviewed the Golob Farms, LLC Dairy Air Quality Management Plan with Mr. Golob. Mr. Golob informed Keith that Golob Farms bought the neighboring Bron Dairy facility in December of 2015.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management:
2.1.2 Feed Management:

2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Freestall/Flush Pens:

2.1.5 Housing – Drylot Pens:

2.1.6 Manure Management:
2.1.7 Land Application:

2.1.8 Road Maintenance:

2.2 Major Air Emissions Sources:
2.2.1 Nutrition Management:

2.2.2 Feed Management:

2.2.3 Housing – Freestall Pens:

2.2.4 Housing – Drylot Pens:

2.2.5 Manure Management:

2.2.6 Land Application:

2.2.7 Road Maintenance:

3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place, but considered ineffective for reducing an air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:
3.1 Feed Management:

3.2 Nutrition Management:

3.3 Milk Parlor & Holding Area:

3.4 House Freestall Barns:

3.5 Housing-Drylot Pens:
3.6 Manure Management:

3.7 Land Application:

3.8 Road Maintenance:
4.1 Inspector Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented:

Inspector Certification:
- Based on the above actions, I find:
  - ☑ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Dustin Harrington
Compliance & Enforcement Division Field Agent
October 14, 2016

4.2 Compliance Determination:
This determination is based on the following actions:
- ☑ Review of Dairy AQMP
- ☑ Review of records on-site
- ☑ Review of Best Management Practices being implemented

Compliance Certification:
Based on the above actions, I find:
- ☑ All BMPs listed in the AQMP were confirmed on inspection.
- ☐ Additional information requested.
- ☐ Another inspection is necessary to confirm implementation of BMPs.
- ☐ One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith Hurley
Compliance & Enforcement Division Supervisor
October 14, 2016
October 14, 2016

Golob Farms LLC  
Attn: Keith Golob  
500 Nelson Road  
Granger, WA 98932

Re: Golob Farms LLC Dairy Evaluation Report

Mr. Golob:  
In accordance with the YRCAA Dairy Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of the Golob Farms LLC Air Quality Management Plan (AQMP) on October 29, 2016. The purpose of the evaluation was to determine whether the Best Management Practices (BMPs) listed in the AQMP are implemented effectively, and to identify BMPs which can be improved in order to achieve reasonable air emission reductions/prevention. A copy of the evaluation report and a score sheet are enclosed for your records.

If you have any questions concerning the report please contact me at (509) 834-2050 ext. 108.

Dustin Harrington
Dustin Harrington  
Compliance Inspector

Encl (2):  
Report  
Score Sheet
# BMP Score Sheet

**Description of Score Sheet** - Scores entered in the gray boxes range from 0 to 5 for each pollutant (3 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). 

1. **How to use this table** - 1) Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2) Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

## Overall Level of BMP Effectivity by Pollutant (%)

<table>
<thead>
<tr>
<th>Overall Score (%) &amp; Grade</th>
<th>BMPs</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>100</td>
<td>96</td>
<td>94</td>
<td>96</td>
<td>94</td>
<td>90</td>
<td>89</td>
<td>86</td>
</tr>
</tbody>
</table>

## Categories

### I. Nutrition

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.1</td>
<td>Properly manage level of dietary protein (%CP)</td>
<td>100</td>
</tr>
<tr>
<td>I.2</td>
<td>Feed increased level or quality of starch in diet</td>
<td>100</td>
</tr>
<tr>
<td>I.3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
<td>100</td>
</tr>
<tr>
<td>I.4</td>
<td>Practice group and/or stage of lactation feeding</td>
<td>96</td>
</tr>
</tbody>
</table>

### II. Feed Management

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.1</td>
<td>Properly manage ensiled feedstocks</td>
<td>100</td>
</tr>
<tr>
<td>II.2</td>
<td>Store feed in a sheltered storage structure</td>
<td>94</td>
</tr>
<tr>
<td>II.3</td>
<td>Regularly remove spilled and unused feed from feeding area</td>
<td>100</td>
</tr>
<tr>
<td>II.4</td>
<td>Manage or minimize feed mixing during windy times</td>
<td>100</td>
</tr>
</tbody>
</table>

### III. Milk Parlor

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>III.1</td>
<td>Ensure proper ventilation</td>
<td>100</td>
</tr>
<tr>
<td>III.2</td>
<td>Use recycled (clean) or treated water for flushing parlor</td>
<td>100</td>
</tr>
<tr>
<td>III.3</td>
<td>Use recycled (clean) or treated water for cleaning holding pen</td>
<td>100</td>
</tr>
</tbody>
</table>

### IV. Housing - Freestall Barns

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV.1</td>
<td>Ensure proper ventilation</td>
<td>96</td>
</tr>
<tr>
<td>IV.2</td>
<td>Bedding selection and management</td>
<td>96</td>
</tr>
<tr>
<td>IV.3</td>
<td>Treat recycled lagoon water used for flushing</td>
<td>96</td>
</tr>
<tr>
<td>IV.4</td>
<td>Remove manure from barns frequently</td>
<td>96</td>
</tr>
<tr>
<td>IV.5</td>
<td>Manure removal technology and efficiency</td>
<td>96</td>
</tr>
<tr>
<td>IV.6</td>
<td>Alleyway floor texture and type</td>
<td>96</td>
</tr>
</tbody>
</table>

### V. Housing - Drylot Pens

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>V.1</td>
<td>Provide shade for cattle</td>
<td>100</td>
</tr>
<tr>
<td>V.2</td>
<td>Sitting of water trough within pen</td>
<td>100</td>
</tr>
<tr>
<td>V.3(a)</td>
<td>Remove manure frequently</td>
<td>100</td>
</tr>
<tr>
<td>V.3(b)</td>
<td>Spread (harrow) manure frequently</td>
<td>100</td>
</tr>
<tr>
<td>V.4</td>
<td>Use straw bedding in pen</td>
<td>100</td>
</tr>
<tr>
<td>V.5</td>
<td>Incorporate wood chips into surface layer</td>
<td>100</td>
</tr>
<tr>
<td>V.6</td>
<td>Utilize urea inhibitors</td>
<td>100</td>
</tr>
<tr>
<td>V.7</td>
<td>Surface moisture content management</td>
<td>100</td>
</tr>
<tr>
<td>V.8</td>
<td>Knock down and remove fence line manure</td>
<td>100</td>
</tr>
</tbody>
</table>

### VI. Grazing Management

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI.1</td>
<td>Stock appropriate number of animals</td>
<td>96</td>
</tr>
<tr>
<td>VI.2</td>
<td>Use rotational grazing</td>
<td>96</td>
</tr>
<tr>
<td>VI.3</td>
<td>Move water and feeding areas frequently</td>
<td>96</td>
</tr>
<tr>
<td>VI.4</td>
<td>Irrigate immediately after grazing</td>
<td>96</td>
</tr>
</tbody>
</table>

### VII. Manure Management

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VII.1</td>
<td>Manure solids - mechanical separation</td>
<td>100</td>
</tr>
<tr>
<td>VII.2</td>
<td>Lagoon or storage covers</td>
<td>100</td>
</tr>
<tr>
<td>VII.3</td>
<td>Scratch exhaust of enclosed waste container</td>
<td>100</td>
</tr>
<tr>
<td>VII.4</td>
<td>Install and properly maintain a methane digester</td>
<td>100</td>
</tr>
<tr>
<td>VII.5</td>
<td>Surface aeration of lagoons</td>
<td>100</td>
</tr>
<tr>
<td>VII.6</td>
<td>Reduce the pH of lagoons and manure piles to 6-7</td>
<td>100</td>
</tr>
<tr>
<td>VII.7</td>
<td>Encourage purple sulfur bacterial formation in anaerobic lagoons</td>
<td>100</td>
</tr>
<tr>
<td>VII.8</td>
<td>Properly manage the composting of manure</td>
<td>100</td>
</tr>
<tr>
<td>VII.9</td>
<td>Properly manage stockpiled manure</td>
<td>100</td>
</tr>
</tbody>
</table>

### VIII. Land Application - Manure or Chemical Fertilizer

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIII.1</td>
<td>Apply N fertilizer below no-till residue</td>
<td>96</td>
</tr>
<tr>
<td>VIII.2</td>
<td>Inject fertilizer/manure into soil at application (corn)</td>
<td>96</td>
</tr>
<tr>
<td>VIII.3</td>
<td>Incorporate fertilizer/manure into soil within 24 hours of application (fodder)</td>
<td>96</td>
</tr>
<tr>
<td>VIII.4</td>
<td>Do not over-irrigate</td>
<td>96</td>
</tr>
<tr>
<td>VIII.5</td>
<td>Utilize cover crops</td>
<td>96</td>
</tr>
<tr>
<td>VIII.6</td>
<td>Apply during cool weather and on still rather than windy days</td>
<td>96</td>
</tr>
</tbody>
</table>

### IX. Other

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IX.1</td>
<td>Installation of windbreaks or shelterbelts</td>
<td>96</td>
</tr>
<tr>
<td>IX.2</td>
<td>Vehicle road condition management</td>
<td>96</td>
</tr>
<tr>
<td>IX.3</td>
<td>Engine selection and efficiency</td>
<td>96</td>
</tr>
</tbody>
</table>

## Overall Level of BMP Effectivity by Pollutant (%)

<table>
<thead>
<tr>
<th>Overall Level of BMP Effectivity by Pollutant (%)</th>
<th>BMPs</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>100</td>
<td>96</td>
<td>94</td>
<td>96</td>
<td>96</td>
<td>94</td>
<td>90</td>
<td>89</td>
<td>86</td>
</tr>
</tbody>
</table>
1. General Information:
   1.1 Facility
      Dairy Name: Haringa Dairy, Inc.
      Mailing Address: 1782 Fordyce Rd., Sunnyside, WA 98944
      Facility Location: 1782 Fordyce Rd., Sunnyside, WA
      Contact Name: Gene and Twyla Haringa
   1.2 Inspection
      Date and Time of Inspection: 7/13/16 at 9:30am
      YRCAA Inspectors: Keith Hurley, Dustin Harrington.
      Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
      Inspection Goals:
      A. To determine whether the BMPs listed in the DenBoer Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
      B. Identify BMPs which can be improved in order to achieve reasonable air emission reduction/prevention.
      Inspection Summary: Keith and Dustin met Gene Haringa at the facility on July 13, 2014 at approximately 9:30 am.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
      2.1.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.8 Road Maintenance:  

2.1.9 Grazing Management: 

2.2 Major Air Emissions Sources: 

2.2.1 Feed Management:  

2.2.2 Nutrition Management:  

2.2.3 Housing – Freestall Pens:  

2.2.4 Housing – Drylot Pens:  

2.2.5 Manure Management:  

2.2.6 Land Application:  

2.2.7 Grazing Management:  

3. Findings and Recommendations: 

The following techniques for improving current best management practices may further reduce air pollutants emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions: 

3.1 Nutrition Management:
3.2 Feed Management:

3.3 Milk Parlor:

3.4 Housing – Freestall/Scrape:

3.5 Housing – Drylot Pens:

3.6 Manure Management:

3.7 Land Application:

4. BMP Implementation Determination

4.1 Inspector Determination:

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;
Inspector Certification:

- Based on the above actions, I find:
  - ☑ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington

Dustin Harrington Date
Compliance & Enforcement Division Field Agent

4.2 Compliance Determination:

This determination is based on the following actions:

- ☑ Review of Dairy AQMP
- ☑ Review of records on-site
- ☑ Review of Best Management Practices being implemented

Compliance Certification:

Based on the above actions, I find:

- ☑ All BMPs listed in the AQMP were confirmed on inspection.
- ☐ Additional information requested.
- ☐ Another inspection is necessary to confirm implementation of BMPs.
- ☐ One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley

Keith Hurley Date
Compliance & Enforcement Division Supervisor
### BMP Score Sheet

**Description of Score Sheet:** Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011).

**How to use this table:**
1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2. Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)", row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

**Overall Score (%) & Grade:**

<table>
<thead>
<tr>
<th>Good</th>
<th>Adequate</th>
<th>Poor</th>
<th>Needs Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>89-100%</td>
<td>79-89%</td>
<td>&lt;60%</td>
<td></td>
</tr>
</tbody>
</table>

### BMP #1 - Nutrition

**I. Nutrition**

- Properly manage level of dietary protein (%CP)
- Feed increased level or quality of starch in diet
- Manage and minimize overfeeding of sulfur-containing feed
- Practice group and/or stage of lactation feeding

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>96</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
</tr>
</tbody>
</table>

### BMP #2 - Feed Management

**II. Feed Management**

- Properly manage ensiled feedstocks
- Store feed in a sheltered storage structure
- Regularly remove spilled and unused feed from feeding area
- Manage or minimize feed mixing during windy times

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>89</td>
<td>88</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### BMP #3 - Milk Parlor

**III. Milk Parlor**

- Ensure proper ventilation
- Use recycled (clean) or treated water for washing and cleaning
- Use recycled (clean) or treated water for cleaning holding pen
- Remove manure from holding area frequently

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>89</td>
<td>88</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### BMP #4 - Housing - Freestall Barns

**IV. Housing - Freestall Barns**

- Ensure proper ventilation
- Bedding selection and management
- Treat recycled lagoon water used for flushing
- Remove manure from barns frequently
- Manure technology and efficiency
- Alleyway floor texture and type

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>89</td>
<td>88</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### BMP #5 - Housing - Drylot Pens

**V. Housing - Drylot Pens**

- Provide shade for cattle
- Settling of water trough within pen
- Spread (harrow) manure frequently
- Use straw bedding in pen
- Use urea inhibitors
- Surface moisture content management
- Knock down and remove fence line manure

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>87</td>
<td>100</td>
<td>90</td>
<td>75</td>
<td>79</td>
<td>78</td>
<td>60</td>
<td>NA</td>
</tr>
</tbody>
</table>

### BMP #6 - Grazing Management

**VI. Grazing Management**

- Stock appropriate number of animals
- Use rotational grazing
- Move water and feeding areas frequently
- Irrigate immediately after grazing

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### BMP #7 - Manure Management

**VII. Manure Management**

- Manure solids - mechanical separation
- Manure solids - settling basin
- Lagoon or storage covers
- Scratch exhaust of enclosed waste containers
- Install and properly maintain a methane digester
- Surface aeration of lagoons
- Reduce the pH of lagoons and manure piles below 6
- Encourage purple sulfur bacterial formation in anaerobic lagoons
- Properly manage the composting of manure
- Properly manage stockpiled manure

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>NA</td>
<td>108</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>97</td>
<td>100</td>
</tr>
</tbody>
</table>

### BMP #8 - Land Application - Manure or Chemical Fertilizer

**VIII. Land Application - Manure or Chemical Fertilizer**

- Apply N fertilizer below no-till residue
- Inject fertilizer/manure into soil at application (corn)
- Incorporate fertilizer/manure into soil within 24 hours of application (forage)
- Apply nutrients according to agronomic recommendations based on soil and manure test results
- Do not over-irrigate
- Utilize cover crops
- Apply during cool weather and on still rather than windy days

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>92</td>
<td>90</td>
<td>80</td>
<td>87</td>
<td>92</td>
<td>60</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### BMP #9 - Other

**IX. Other**

- Installation of windbreaks or shelterbelts
- Vehicle road condition management
- Engine selection and efficiency

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#DIV/0!</td>
<td>NA</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>80</td>
<td>86</td>
<td>87</td>
</tr>
</tbody>
</table>

**Overall Level of BMP Effectivity by Pollutant (%)**

<table>
<thead>
<tr>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>92</td>
<td>93</td>
<td>90</td>
<td>88</td>
<td>88</td>
<td>86</td>
<td>87</td>
<td>20</td>
</tr>
</tbody>
</table>

**Facility:** Haringa  
**Date:** 7/13/2016  
**(Version 9: 07/7/16)**
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:
   1.1. Facility
   Dairy Name: Harrison Road Dairy.
   Mailing Address: 1860 Harrison Road, Sunnyside, WA 98944
   Facility Location: 1860 Harrison Road, Sunnyside, WA 98944
   Contact Name: Mr. Frank Leyendekker (Owner) or Mr. Josh VanDerVegt (Manager)

   1.2. Inspection
   Date and Time of Inspection: November 2, 2015 at 10am
   YRCAA Inspectors: Keith Hurley & Dustin Harrington;
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A) To determine whether the BMPs utilized at the Harrison Road Diary are implemented effectively.
   B) Identify BMPs which are in need of improvement in order to achieve reasonable air emission reduction/prevention.

   Inspection Summary: [Redacted]

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management: [Redacted]
   2.1.2 Feed Management: [Redacted]
2.1.3 Housing – Drylot Pens:  

2.1.4 Manure Management:  

2.1.5 Land Application:  

2.1.6 Road Maintenance:  

2.1.7 Milk Parlor & Holding Area:  

2.2 Major Air Emissions Sources:  

2.2.1 Feed Management:  

2.2.2 Nutrition Management:  

2.2.3 Housing – Freestall Pens:  

2.2.4 Housing – Drylot Pens:  

RCW 70.94.205...Information relating to processes or production unique to the owner or operator
3. Findings and Recommendations:
The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation of the following BMPs to achieve further reductions of air emissions:

3.1 Nutrition Management:

3.2 Feed Management:

3.3 Housing – Drylot Pens:

3.4 Manure Management:

3.5 Land Application:

3.7 Milking parlor:
4. BMP Implementation Determination
   4.1 Inspector Determination
   This determination is based on the following actions:
   - Review of Dairy AQMP
   - On Site Inspection, including (check each aspect inspected):
     - On-site record keeping;
     - Best Management Practices being implemented;
   - Inspector Certification:
   - Based on the above actions, I find:
     - No additional information needed.
     - Additional information requested.
     - The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Dustin Harrington
Compliance & Enforcement Division Field Agent
November 16, 2015

4.2 Compliance Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site

Compliance Certification:
- Based on the above actions, I find:
  - All BMPs listed in the AQMP were confirmed on inspection.
  - Additional information requested
  - Another inspection is necessary to confirm implementation of BMPs.
  - One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith Hurley
Compliance & Enforcement Division Supervisor
November 16, 2015
November 16, 2015

Harrison Road Dairy
C/o Frank Leyendekker & Josh Van DerVegt
1860 Harrison Road,
Sunnyside, WA 98944

Gentlemen,

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on November 2, 2015. The evaluation consisted of a site visit to determine whether the BMPs utilized by your dairy are being effectively implemented and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed, and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions please feel free to contact me at 834-2050, ext. 112, or Dustin Harrington at ext. 113.

Sincerely,

Keith M. Hurley
Compliance & Enforcement Division Supervisor

Encl: Evaluation Report
     BMP Score Sheet
August 3, 2015

Harrison Road Dairy
C/o Frank Leyendekker
1860 Harrison Road
Sunnyside, WA 98944


Mr. Leyendekker:

On July 8, 2015, this office attempted to contact your dairy via phone to schedule the above evaluation. Mr. Dustin Harrington reports that there was no answering machine available for leaving a voice message. Our goal is to minimize the disturbance of your daily operations while efficiently completing the evaluation, and your communication with this office is critical in accomplishing this goal. As of the above date there has been no communication from the dairy. I encourage you to contact this office and make arrangements for the completion of this important evaluation as soon as possible.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 112.

Keith M. Hurley
Keith M. Hurley
Compliance & Air Monitoring Division Supervisor
### Description of Score Sheet
- Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011).

#### How to use this table
1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2. Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

#### How to use this table
- BMPs are listed in a specific order. Each BMP is assessed on a scale of 0 to 5, with 5 being the highest level of implementation and 0 being no implementation.
- Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections.
- A score below 70% should be evaluated and you should consider making improvements in that category.

#### How to use this table
- The AQ BMP Score Sheet provides a framework for evaluating the effectiveness of Best Management Practices (BMPs) in managing pollutants at a facility.
- The score for each BMP is based on a visual evaluation of the practices implemented, with scores ranging from 0 to 5.
- A score below 70% indicates a need for improvement.

### Overall Score (%) & Grade

<table>
<thead>
<tr>
<th>Overall Score (%) &amp; Grade</th>
<th>Good</th>
<th>Adequate</th>
<th>Poor - Needs Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>69</td>
<td>D</td>
<td>100-90%</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>D</td>
<td>90-80%</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>D</td>
<td>80-70%</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>D</td>
<td>70-60%</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>D</td>
<td>&lt;60%</td>
</tr>
</tbody>
</table>

### BMP # | Best Management Practice | Ammonia (NH₃) | Nitrous Oxide (N₂O) | Hydrogen Sulfide (H₂S) | Volatile Organic Compounds (VOCs) | Odor | Particulate Matter (PM) | Methane (CH₄) | Oxides of Nitrogen (NOₓ) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (%CP)</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>20</td>
<td>64</td>
<td>NA</td>
<td>43</td>
<td>NA</td>
</tr>
<tr>
<td>I. 2</td>
<td>Feed increased level or quality of starch in diet</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>20</td>
<td>64</td>
<td>NA</td>
<td>43</td>
<td>NA</td>
</tr>
<tr>
<td>I. 3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>20</td>
<td>64</td>
<td>NA</td>
<td>43</td>
<td>NA</td>
</tr>
<tr>
<td>I. 4</td>
<td>Practice group and/or stage of lactation feeding</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>20</td>
<td>64</td>
<td>NA</td>
<td>43</td>
<td>NA</td>
</tr>
</tbody>
</table>

### AQ BMP Score Sheet

<table>
<thead>
<tr>
<th>Category Level of BMP Implementation (%)</th>
<th>69</th>
<th>74</th>
<th>73</th>
<th>70</th>
<th>69</th>
<th>66</th>
<th>65</th>
</tr>
</thead>
</table>

### How to use this table
- BMPs are listed in a specific order. Each BMP is assessed on a scale of 0 to 5, with 5 being the highest level of implementation and 0 being no implementation.
- Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections.
- A score below 70% indicates a need for improvement.

### Overall Level of BMP Effectiveness by Pollutant (%)

| Overall Level of BMP Effectiveness by Pollutant (%) | 69 | 74 | 73 | 70 | 69 | 66 | 65 |
## AQ BMP Score Sheet

### Description of Score Sheet
- Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). How to use this table: 1) Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2) Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

### Overall Score (%) & Grade:

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Feed Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III. Milk Parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV. Housing - Freestall Barns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V. Housing - Drylot Pens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI. Grazing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII. Manure Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII. Land Application - Manure or Chemical Fertilizer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Category of BMP Implementation (%)

- NA: Not Applicable
- #DIV/0!: Data input error

### BMP Specifics

| Facility: Hidden Valley Dairy, LLC | Date: 11/1/2016 | (Version 10; 08/29/16) | RCW42.56.610...Certain information from dairies and feedlots limited to number of animals, volume of livestock, nutrients generated, number of acres covered |

<table>
<thead>
<tr>
<th>Facility</th>
<th>Hidden Valley Dairy, LLC</th>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Feed Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III. Milk Parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV. Housing - Freestall Barns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V. Housing - Drylot Pens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI. Grazing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII. Manure Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII. Land Application - Manure or Chemical Fertilizer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### How to Use This

- Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
- Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.).
- Use these to identify the areas where improvements can be made.

### Table

<table>
<thead>
<tr>
<th>Overall Score (%) &amp; Grade</th>
<th>88</th>
<th>80</th>
<th>100</th>
<th>93</th>
<th>90</th>
<th>84</th>
<th>94</th>
<th>89</th>
<th>85</th>
<th>97</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Feed Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III. Milk Parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV. Housing - Freestall Barns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V. Housing - Drylot Pens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI. Grazing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII. Manure Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII. Land Application - Manure or Chemical Fertilizer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). How to use this table: 1) Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2) Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

### Description of Score Sheet

- NA: Not Applicable
- #DIV/0!: Data input error

### Facility

- Hidden Valley Dairy, LLC

### Date

- 11/1/2016

### (Version 10; 08/29/16)

### RCW42.56.610...Certain information from dairies and feedlots limited to number of animals, volume of livestock, nutrients generated, number of acres covered.
1. General Information:
   1.1 Facility
   Dairy Name: Hidden Valley Dairy, LLC.
   Mailing Address: P.O. Box 646, Mabton, WA 98935
   Facility Location: 2253 Boundary Road, Mabton, WA 98935
   Contact Name: Sid or Eric Leyendekker
   
   1.2. Inspection
   Date and Time of Inspection: November 1, 2016 @ 9am
   YRCAA Inspectors: Keith Hurley
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A) To determine whether the BMPs listed in the Hidden Valley Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
   B) Identify BMPs which can be improved upon in order to achieve reasonable air emission reduction/prevention.
   
   Inspection Summary: Eric Leyendekker met Keith on the above date and time at the Hidden Valley Dairy LLC facility. Keith led Eric through a review of the facility’s 2016 AQMP and provided some clarification to Eric as to how to fill out sections 7, 8, 9, and 10 of the plan. The new infrastructure to be approximately one million dollars. Keith verified that the dairy still

After completion of the review Eric led Keith on a tour of the facility.

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management:
   2.1.2 Feed Management:
   2.1.3 Milk Parlor & Holding Area:
2.1.4 Housing – Drylot Pens: Hidden Valley Dairy LLC has 25 Drylot pens. Overall there is shade provided for approach.

2.1.5 Manure Management: Manure removed from the pens is either placed in a central location for drying or...

2.1.6 Land Application: 

2.1.7 Road Maintenance: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.2 Major Air Emissions Sources:

2.2.1 Feed Management

2.2.2 Housing – Drylot Pens:

2.2.3 Manure Management:

2.2.4 Land Application:

2.2.5 Housing – Freestall Pens:

2.2.6 Housing – Drylot Pens:

2.2.7 Land Application:

3. Findings and Recommendations:

3.1 Nutrition Management:

3.2 Feed Management:
3.3 Milk Parlor & Holding Area:

3.4 Housing-Drylot Pens:

3.5 Manure Management:

3.6 Land Application:
3.7 Road Maintenance:

4. BMP Implementation Determination

4.1 Compliance Determination:
This determination is based on the following actions:

√ Review of Dairy AQMP
√ Review of records on-site
√ Review of Best Management Practices being implemented

Compliance Certification:
Based on the above actions, I find:

√ All BMPs listed in the AQMP were confirmed on inspection.
□ Additional information requested.
□ Another inspection is necessary to confirm implementation of BMPs.
□ One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith M. Hurley          November 16, 2016
Compliance & Enforcement Division Supervisor
April 13, 2016

Highview Inc.
C/o John Koopmans
3010 Lucy Lane
Zillah, WA 98953

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) Evaluation

Mr. Prins:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on March 31, 2016. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact Dustin Harrington at (509) 834-2050 ext. 108.

Dustin Harrington
Dustin Harrington
Compliance Inspector

Encl: Site Visit Report
Score Sheet D1&D2
August 3, 2015

Highview Dairy
C/o John Koopmans
3010 Lucy Lane
Zillah, WA 98953


Mr. Koopmans:

On July 8, 2015, this office contacted your dairy via phone to schedule the above evaluation. Mr. Dustin Harrington left a voice message requesting someone from the dairy contact this office to schedule the above evaluation. Our goal is to minimize the disturbance of your daily operations while efficiently completing the evaluation, and your communication with this office is crucial in accomplishing this goal. As of the above date there has been no communication from the dairy. I encourage you to contact this office and make arrangements for the completion of this important evaluation as soon as possible.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 112.

Keith M. Hurley
Keith M. Hurley
Compliance & Air Monitoring Division Supervisor
<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (%SCP)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>60</td>
<td>100</td>
<td>NA</td>
<td>71</td>
<td>NA</td>
</tr>
<tr>
<td>I. 2</td>
<td>Feed increased level or quality of starch in diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. 3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. 4</td>
<td>Practice group and/or stage of lactation feeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Category Level of BMP Implementation (%)</th>
<th>Overall Score (%) &amp; Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>78</td>
</tr>
<tr>
<td>90-100</td>
<td>100</td>
</tr>
<tr>
<td>90-80</td>
<td>89</td>
</tr>
<tr>
<td>80-70</td>
<td>79</td>
</tr>
<tr>
<td>70-60</td>
<td>69</td>
</tr>
<tr>
<td>&lt;60</td>
<td>59</td>
</tr>
</tbody>
</table>

**How to use this table**

1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2. Review the score (%) for each BMP category. The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

**Overall Level of BMP Effectivity by Pollutant (%)**

<table>
<thead>
<tr>
<th>Overall Level of BMP Effectivity by Pollutant (%)</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>78</td>
<td>90</td>
<td>81</td>
<td>77</td>
<td>77</td>
<td>76</td>
<td>74</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>
## AQ BMP SCORE SHEET

### Description of Score Sheet

Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011).

1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2. Review the score (%) for each BMP # (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

### How to use this table

- **BMP #**
- **Best Management Practice**
- **Ammonia (NH₃)**
- **Nitrous Oxide (N₂O)**
- **Hydrogen Sulfide (H₂S)**
- **Particulate Matter (PM)**
- **Methane (CH₄)**
- **Oxides of Nitrogen (NOₓ)**

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (%CP)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>80</td>
<td>71</td>
<td>80</td>
</tr>
<tr>
<td>I. 2</td>
<td>Feed increased level or quality of starch in diet</td>
<td>80</td>
<td>NA</td>
<td>NA</td>
<td>85</td>
<td>86</td>
<td>85</td>
</tr>
<tr>
<td>I. 3</td>
<td>Practice group and/or stage of lactation feeding</td>
<td>NA</td>
<td>98</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>II.</td>
<td>Feed Management</td>
<td>89</td>
<td>NA</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>III.</td>
<td>Milk Parlor</td>
<td>89</td>
<td>NA</td>
<td>100</td>
<td>85</td>
<td>87</td>
<td>85</td>
</tr>
<tr>
<td>IV.</td>
<td>Housing - Freestall Barns</td>
<td>89</td>
<td>NA</td>
<td>100</td>
<td>85</td>
<td>87</td>
<td>85</td>
</tr>
<tr>
<td>V.</td>
<td>Housing - Drylot Pens</td>
<td>89</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>NA</td>
</tr>
<tr>
<td>VI.</td>
<td>Grazing Management</td>
<td>89</td>
<td>NA</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>78</td>
</tr>
<tr>
<td>VII.</td>
<td>Manure Management</td>
<td>62</td>
<td>NA</td>
<td>98</td>
<td>#DIV/0!</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td>VIII.</td>
<td>Land Application - Manure or Chemical Fertilizer</td>
<td>80</td>
<td>NA</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>NA</td>
</tr>
<tr>
<td>IX.</td>
<td>Other</td>
<td>85</td>
<td>87</td>
<td>80</td>
<td>80</td>
<td>85</td>
<td>80</td>
</tr>
</tbody>
</table>

### Overall Level of BMP Effectivity by Pollutant (%)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Overall Level of BMP Effectivity by Pollutant (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>79</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>90</td>
</tr>
<tr>
<td>Sulfur</td>
<td>82</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>82</td>
</tr>
<tr>
<td>Nitrate</td>
<td>80</td>
</tr>
<tr>
<td>Nitrite</td>
<td>75</td>
</tr>
<tr>
<td>Sulfate</td>
<td>76</td>
</tr>
</tbody>
</table>

### Description of Score Sheet

- **Overall Score (%) & Grade:**
- **Good (B):** 80-100%
- **Adequate (C):** 79-70%
- **Poor - Needs improvement (D):** 69-60%
- **Very poor (E):** <60%

---

### Facility: Highview Dairy 2

**Date:** 3/31/2016

**Version:** 8. 04/16
1. General Information:

1.1 Facility

Dairy Name: Maple Grove Dairy, LLC and Spring Canyon Ranch, LLC
Mailing Address: 3620 Independence Rd. Sunnyside, WA 98944
Facility Location: 3620 Independence Rd. Sunnyside, WA 98944
Contact Name: Brian Bosma

1.2. Inspection

Date and Time of Inspection: 6/27/12 at 9:30 AM
YRCAA Inspectors: Mr. Mark Edler and Dr. Hasan Tahat

Inspection Rationale: To determine feasible and effective techniques for prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Project purposes (Implementation Trial).

Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.

2. Speciﬁc Information

2.1. Description of Systems Inspected:

2.1.2 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.3 Feed Management:

2.1.4 Milk Parlor & Holding Area:

2.1.5 Housing – Freestall/Flush Pens:

2.1.6 Housing – Drylot Pens:

2.1.7 Manure Management:
2.1.8 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.9 Road Maintenance: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2 Major Air Emissions Sources:

2.2.1 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.2 Housing – Freestall Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.4 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Recommendations:

The following are not requirements rather they are recommendations for altering current best management practices in order to reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix F of the policy (available at the agency’s website: http://www.yakimacleanair.org/PDFs/Dairy/Final%20Dairy%20Policy/Final%20Dairy%20Policy%2008mar12.pdf). This may be used to help determine which BMP recommendations to implement first.

3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.3 Housing – Freestall/Flush pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.4 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
4. BMP Implementation Determination

4.1 Inspector Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - ☑ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector                     Date

4.2 Engineer Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:
- Based on the above actions, I find:
  - ☑ All BMPs listed in the AQMP were confirmed on inspection.
  - ☐ Another inspection is necessary to confirm implementation of BMPs.
  - ☐ One or more BMPs need immediate attention due to the current system conditions.

Hasan Tahat, Ph.D. - Engineer                     Date
1. General Information:

1.1 Facility

Dairy Name: Sunnyside Dairy 1 & 2
Mailing Address: 4581 Maple Grove Rd., Sunnyside, WA 98944
Facility Location: 4581 Maple Grove Rd., Sunnyside, WA 98944
Contact Name: Rosalio Brambila

1.2 Inspection

Date and Time of Inspection: 7/13/12 at 9:30 AM
YRCAA Inspectors: Mr. Mark Edler and Dr. Hasan Tahat
Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Project purposes (Implementation Trial).
Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.
Inspection Summary: The inspection began by Hasan Tahat introduction and identification of the inspection team, and giving a brief overview of the implementation trial of approved policy and inspection goals. I continued the in-brief by explaining to Mr. Rosalio Brambila and MR. Jon Wheeler how the inspection would progress from start to finish.

2. Specific Information

2.1 Description of Systems Inspected:

2.1.1 Nutrition Management: RCW 70.94.205... Information relating to processes or production unique to the owner or operator

2.1.2 Feed Management: RCW 70.94.205... Information relating to processes or production unique to the owner or operator
2.1.3 Milk Parlor & Holding Area:

- [ ] Information relating to processes or production unique to the owner or operator.

2.1.4 Housing – Drylot Pens:

- [ ] Information relating to processes or production unique to the owner or operator.

2.1.5 Manure Management:

- [ ] Information relating to processes or production unique to the owner or operator.

2.1.6 Land Application:

- [ ] Information relating to processes or production unique to the owner or operator.
2.1.7 Road Maintenance: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2 Major Air Emissions Sources:

2.2.1 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.3 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.4 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Recommendations:
The following are not requirements rather they are recommendations for altering current best management practices in order to further reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive and/or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix F of the policy (available at the agency’s website and a copy is included with this report http://www.yakimacleanair.org). This may be used to help determine which BMP recommendations to implement first. YRCAA recommends implementation of the following BMPs in order to achieve further reductions of air emissions:

3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.3 Housing – Drylot Pens/flush alleyways: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.4 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.6 Milking Parlor: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.7 Other: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

4. BMP Implementation Determination
4.1 Inspector Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;
Inspector Certification:
Based on the above actions, I find:

☑ No additional information needed.
☐ Additional information requested.
☐ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector                    Date

4.2 Engineer Determination
This determination is based on the following actions:

• Review of Dairy AQMP
• Review of records on-site
• Review of inspection notes

Engineer Certification:
• Based on the above actions, I find:
  ☑ All BMPs listed in the AQMP were confirmed on inspection.
  ☐ Another inspection is necessary to confirm implementation of BMPs.
  ☐ One or more BMPs need immediate attention due to the current system conditions.

Hasan Tahat, Ph.D. - Engineer             Date
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:
   1.1 Facility
      Dairy Name: Golob Dairy, Inc.
      Mailing Address: 500 Nelson Rd. Granger, WA  98932
      Facility Location: 500 Nelson Rd. Granger, WA  98932
      Contact Name: Keith or Bob Golob

   1.2. Inspection
      Date and Time of Inspection: 7/3/12 at 10:00 AM
      YRCAA Inspectors: Mr. Mark Edler and Dr. Hasan Tahat
      Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Project purposes (Implementation Trial).
      Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.
      Inspection Summary: The inspection began by Hasan Tahat introduction and identification of the inspection team, and giving a brief overview of the implementation trial of approved policy and inspection goals. I continued the in-brief by explaining to Mr. Keith Golob how the inspection would progress from start to finish. Mark proceeded and asked Keith if he ever received complaints from neighbors of the dairy.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management: RCW 70.94.205. Information relating to processes or production unique to the owner or operator
      ...Continued...
      2.1.2 Feed Management: RCW 70.94.205. Information relating to processes or production unique to the owner or operator
      ...Continued...
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Freestall/Flush Pens:

2.1.5 Housing – Drylot Pens:

2.1.6 Manure Management:

2.1.7 Land Application:

2.1.8 Road Maintenance:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Housing – Freestall Pens:

2.2.3 Housing – Drylot Pens:
2.2.4 Manure Management:

2.2.5 Land Application:

3. Recommendations:
The following are not requirements rather they are recommendations for altering current best management practices in order to reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix F of the policy (available at the agency’s website and a copy is included with this report [http://www.yakimacleanair.org](http://www.yakimacleanair.org)). This may be used to help determine which BMP recommendations to implement first.

3.1 Nutrition Management:

3.2 Feed Management:

3.3 Housing – Freestall/Flush pens:

3.4 Housing – Drylot Pens:

3.5 Manure Management:

3.6 Land Application:

3.7 Other:

4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspection Certification:

- Based on the above actions, I find:
  - No additional information needed.
☐ Additional information requested.
☐ The Dairy was unable to provide adequate information for a full inspection.

___________________________  ________________________________
Mark Edler - Inspector                Date

4.2 Engineer Determination

This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:
- Based on the above actions, I find:
  ✔ All BMPs listed in the AQMP were confirmed on inspection.
  ✔ Another inspection is necessary to confirm implementation of BMPs.
  ☐ One or more BMPs need immediate attention due to the current system conditions.

___________________________  ________________________________
Hasan Tahat, Ph.D. - Engineer                Date
1. General Information:
   1.1 Facility
      Dairy Name: Skyridge Farms
      Mailing Address: 4701 Scoon Road, Sunnyside, WA. 98944
      Facility Location: 4701 Scoon Road, Sunnyside, WA. 98944
      Contact Name: Dan DeGroot

   1.2 Inspection
      Date and Time of Inspection: 7/18/12 at 10:00 AM
      YRCAA Inspectors: Mr. Mark Edler and Dr. Hasan Tahat
      Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Plan (AQMP) and Best Management Practices (BMP) for Dairy Operations Project purposes (Implementation Trial).
      Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.
      Inspection Summary: The inspection began by Hasan Tahat introduction and identification of the inspection team, and giving a brief overview of the implementation trial of approved policy and inspection goals. I continued the in-brief by explaining to Mr. Dan DeGroot how the inspection would progress from start to finish.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
      2.1.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.3 Milk Parlor & Holding Area: RCW 70.94.205... Information relating to processes or production unique to the owner or operator

2.1.4 Housing – Freestall/Flush Pens: RCW 70.94.205... Information relating to processes or production unique to the owner or operator

2.1.5 Housing – Drylot Pens: RCW 70.94.205... Information relating to processes or production unique to the owner or operator

2.1.6 Manure Management: RCW 70.94.205... Information relating to processes or production unique to the owner or operator

2.1.7 Land Application: RCW 70.94.205... Information relating to processes or production unique to the owner or operator

2.1.8 Road Maintenance: RCW 70.94.205... Information relating to processes or production unique to the owner or operator
2.2 Major Air Emissions Sources:

2.2.1 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.2 Housing – Freestall Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.4 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Recommendations:

The following are not requirements rather they are recommendations for altering current best management practices in order to reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix F of the policy (available at the agency’s website and a copy is included with this report http://www.yakimacleanair.org). This may be used to help determine which BMP recommendations to implement first.

3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.3 Housing – Freestall/Flush pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.4 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.5 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.6 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.7 Other: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
4. BMP Implementation Determination

4.1 Inspector Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - ✓ No additional information needed.
  - □ Additional information requested.
  - □ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector

4.2 Engineer Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:
- Based on the above actions, I find:
  - ✓ All BMPs listed in the AQMP were confirmed on inspection.
  - ✓ Another inspection is necessary to confirm implementation of BMPs.
  - □ One or more BMPs need immediate attention due to the current system conditions.

Hasan Tahat, Ph.D. - Engineer

Date
1. General Information:

1.1 Facility

Dairy Name: Liberty Dairy LLC (first Facility) and Suncrest Farms LLC (second Facility).
Mailing Address: 4300 Beam Rd., Zillah, WA 98953
Facility Location: 5860 E. Zillah Dr., Granger and 440 Dekker Rd., Outlook
Contact Name: Henry Bosma

1.2. Inspection

Date and Time of Inspection: 11/28/12 at 8:30 AM
YRCAA Inspectors: Mr. Mark Edler and Dr. Hasan Tahat

Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Policy (AQMP) and Best Management Practices (BMP) for Dairy Operations purposes (Implementation Trial).

Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve sufficient air emission prevention.

Inspection Summary: The inspection began by Mark Edler introduction and identification of the inspection team, and giving a brief overview of the implementation trial of the approved policy and inspection goals. Dr. Hasan Tahat continued the in-brief by explaining to Mr. Henry Bosma the rational and the inspection goals for this implementation trial period and how the inspection would progress from start to finish.

2. Specific Information

2.1 Description of Systems Inspected:

2.1.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Freestall/Flush Pens:

2.1.5 Housing – Drylot Pens:

2.1.6 Manure Management:

2.1.7 Land Application:
2.1.8 Road Maintenance: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2 Major Air Emissions Sources:

2.2.1 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.2 Housing – Freestall Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.4 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Recommendations:

The following are not requirements rather they are recommendations for altering current best management practices in order to reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive or easiest to implement and Tier 3 being the most advance and most expensive. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix F of the policy (available at the agency’s website and a copy is included with this report http://www.yakimacleanair.org). This may be used to help determine which BMP recommendations to implement first.

3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.3 Housing – Freestall/Flush pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.4 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
3.5 Manure Management: [RCW 70.94.205...Information relating to processes or production unique to the owner or operator]

3.6 Land Application: [RCW 70.94.205...Information relating to processes or production unique to the owner or operator]

3.7 Other: [RCW 70.94.205...Information relating to processes or production unique to the owner or operator]

4. BMP Implementation Determination

4.1 Inspector Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - No additional information needed.
  - Additional information requested.
  - The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector                       Date

4.2 Engineer Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:
- Based on the above actions, I find:
  - All BMPs listed in the AQMP were confirmed on inspection.
  - Another inspection is necessary to confirm implementation of BMPs.
  - One or more BMPs need immediate attention due to the current system conditions.

Hasan M. Tahat, Ph.D., - Engineer              Date
1. General Information:

1.1 Facility
Dairy Name: Haringa Dairy, Inc.
Mailing Address: 1782 Fordyce Rd., Sunnyside, WA 98944
Facility Location: 1782 Fordyce Rd., Sunnyside, WA
Contact Name: Gene Haringa

1.2. Inspection
Date and Time of Inspection: 1/16/13 at 10:30 AM
YRCAA Inspectors: Mr. Mark Edler and Dr. Hasan Tahat
Inspection Rationale: To determine feasible and effective techniques for the prevention of air emissions from dairy operations located in the jurisdiction of the Yakima Regional Clean Air Agency (YRCAA) pursuant to Air Quality Management Policy (AQMP) and Best Management Practices (BMP) for Dairy Operations purposes (Implementation Trial).
Inspection Goals: To determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement in regards to air emissions to achieve air emission prevention and or reduction.
Inspection Summary: The inspection began by Hasan Tahat introduction and identification of the inspection team, and giving a brief overview of the implementation trial of approved policy and inspection goals. The team started by helping Mr. Gene Haringa completing the Air Quality Management Plan (AQMP) first. We then, continued the in-brief by explaining to Mr. Gene Haringa how the inspection would progress from start to finish.

2. Specific Information

2.1 Description of Systems Inspected:
2.1.1 Nutrition Management:
RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.2 Feed Management:
RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.3 Milk Parlor & Holding Area: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.4 Housing – Freestall/Scrape: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.5 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.6 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.7 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.8 Road Maintenance: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.9 Grazing Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.2 Major Air Emissions Sources:

2.2.1 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.2 Housing – Freestall Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.3 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.4 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.5 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.6 Grazing Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Recommendations:

The following are not requirements rather they are recommendations for altering current best management practices in order to reduce air pollutant emission potential. It is understood that some of the recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive or easiest to implement and Tier 3 being the most difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix F of the policy (available at the agency’s website and a copy is included with this report http://www.yakimacleanair.org). This may be used to help determine which BMP recommendations to implement first.

3.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.3 Milk Parlor: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3.4 Housing – Freestall/Scrape: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
3.5 Housing – Drylot Pens:

3.6 Manure Management:

3.7 Land Application:

3.8 Other:

4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - ✓ No additional information needed.
  - □ Additional information requested.
  - □ The Dairy was unable to provide adequate information for a full inspection.

Mark Edler - Inspector

4.2 Engineer Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:

- Based on the above actions, I find:
  - ✓ All BMPs listed in the AQMP were confirmed on inspection.
  - ✓ Another inspection is necessary to confirm implementation of BMPs.
  - □ One or more BMPs need immediate attention due to the current system conditions.

Hasan M. Tahat, Ph.D., - Engineer


### AQ BMP SCORE SHEET

**Description of Score Sheet**: Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). How to use this table:

1. Review your overall score. A score above 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2. Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxides, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

#### Overall Score (%) & Grade

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (%CP)</td>
</tr>
<tr>
<td>I. 2</td>
<td>Feed increased level or quality of starch in diet</td>
</tr>
<tr>
<td>I. 3</td>
<td>Manage and minimize overheating of sulfur-containing feed</td>
</tr>
<tr>
<td>I. 4</td>
<td>Practice group and/or stage of lactation feeding</td>
</tr>
<tr>
<td>II. 1</td>
<td>Properly manage ensiled feedstuff</td>
</tr>
<tr>
<td>II. 2</td>
<td>Store feed in a sheltered storage structure</td>
</tr>
<tr>
<td>II. 3</td>
<td>Regularly remove spilled and unused feed from feeding area</td>
</tr>
<tr>
<td>II. 4</td>
<td>Manage or minimize feed mixing during windy times</td>
</tr>
<tr>
<td>III. 1</td>
<td>Ensure proper ventilation</td>
</tr>
<tr>
<td>III. 2</td>
<td>Use recycled (clean) or treated water for flushing parlor</td>
</tr>
<tr>
<td>III. 3</td>
<td>Use recycled (clean) or treated water for cleaning holding pen</td>
</tr>
<tr>
<td>III. 4</td>
<td>Remove manure from holding area frequently</td>
</tr>
<tr>
<td>IV. 1</td>
<td>Provide shade for cattle</td>
</tr>
<tr>
<td>IV. 2</td>
<td>Siting of water trough within pen</td>
</tr>
<tr>
<td>IV. 3</td>
<td>Treat recycled lagoon water used for flushing</td>
</tr>
<tr>
<td>IV. 4</td>
<td>Remove manure from barns frequently</td>
</tr>
<tr>
<td>IV. 5</td>
<td>Manure removal technology and efficiency</td>
</tr>
<tr>
<td>IV. 6</td>
<td>Alleyway floor texture and type</td>
</tr>
<tr>
<td>V. 1</td>
<td>Stock appropriate number of animals</td>
</tr>
<tr>
<td>V. 2</td>
<td>Use rotational grazing</td>
</tr>
<tr>
<td>V. 3</td>
<td>Move water and feeding areas frequently</td>
</tr>
<tr>
<td>V. 4</td>
<td>Irrigate immediately after grazing</td>
</tr>
<tr>
<td>VI. 1</td>
<td>Properly manage the composting of manure</td>
</tr>
<tr>
<td>VI. 2</td>
<td>Use cover crops</td>
</tr>
<tr>
<td>VI. 3</td>
<td>Apply fertilizers below no-till residue</td>
</tr>
<tr>
<td>VI. 4</td>
<td>Do not over-irrigate</td>
</tr>
<tr>
<td>VI. 5</td>
<td>Install windbreaks or shelterbelts</td>
</tr>
<tr>
<td>VII. 1</td>
<td>Properly manage level of dietary protein (%CP)</td>
</tr>
<tr>
<td>VII. 2</td>
<td>Feed increased level or quality of starch in diet</td>
</tr>
<tr>
<td>VII. 3</td>
<td>Manage and minimize overheating of sulfur-containing feed</td>
</tr>
<tr>
<td>VII. 4</td>
<td>Practice group and/or stage of lactation feeding</td>
</tr>
<tr>
<td>VIII. 1</td>
<td>Apply N fertilizer below no-till residue</td>
</tr>
<tr>
<td>VIII. 2</td>
<td>Inoculate fertilizer/manure into soil at application (corn)</td>
</tr>
<tr>
<td>VIII. 3</td>
<td>Incorporate fertilizer/manure into soil within 24 hours of application (forage)</td>
</tr>
<tr>
<td>VIII. 4</td>
<td>Apply nutrients according to agronomic recommendations based on soil and manure test results</td>
</tr>
<tr>
<td>VIII. 5</td>
<td>Do not over-irrigate</td>
</tr>
<tr>
<td>VIII. 6</td>
<td>Utilize cover crops</td>
</tr>
<tr>
<td>VIII. 7</td>
<td>Apply during cool weather and on still rather than windy days</td>
</tr>
<tr>
<td>IX. 1</td>
<td>Installation of windbreaks or shelterbelts</td>
</tr>
<tr>
<td>IX. 2</td>
<td>Vehicle road condition management</td>
</tr>
<tr>
<td>IX. 3</td>
<td>Engine selection and efficiency</td>
</tr>
</tbody>
</table>

#### Results Summary

**Overall Score (%)**: 89

**Overall Level of BMP Effectivity by Pollutant (%):**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>% Effectivity</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (NH₃)</td>
<td>90</td>
<td>Adequate</td>
</tr>
<tr>
<td>Nitrous Oxide (N₂O)</td>
<td>80</td>
<td>Adequate</td>
</tr>
<tr>
<td>Sulfur Oxides (SOₓ)</td>
<td>80</td>
<td>Adequate</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOCs)</td>
<td>80</td>
<td>Adequate</td>
</tr>
<tr>
<td>Odor</td>
<td>80</td>
<td>Adequate</td>
</tr>
<tr>
<td>Particulate Matter (PM)</td>
<td>80</td>
<td>Adequate</td>
</tr>
<tr>
<td>Methane (CH₄)</td>
<td>80</td>
<td>Adequate</td>
</tr>
<tr>
<td>Oxides of Nitrogen (NOₓ)</td>
<td>80</td>
<td>Adequate</td>
</tr>
</tbody>
</table>

**Overall Score (%)**: 89

**Grade**: B
July 6, 2016

J & L Rollinger Farms
C/o Joe Rollinger, Owner
840 East Allen Road
Sunnyside, WA 98944

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) Evaluation

Mr. Rollinger:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on June 21, 2016. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 108.

Dustin Harrington
Compliance Inspector

Encl: Site Visit Report
    Score Sheet
YAKIMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:
   1.1 Facility
   Dairy Name: J & L Rollinger Farms
   Mailing Address: 840 East Allen Road, Sunnyside, WA, 98944
   Facility Location: 840 East Allen Road, Sunnyside, WA, 98944
   Contact Name: Joe Rollinger

1.2. Inspection
   Date and Time of Inspection: June 21, 2016 @9am
   YRCAA Inspectors: Keith Hurley, Dustin Harrington, Kelsey Sanford
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A) To determine whether the BMPs listed in the J&L Rollinger Farms Air Quality Management Plan (AQMP) are implemented effectively.
   B) Identify BMPs which can be improved upon in order to achieve reasonable air emission reduction/prevention.

   Inspection Summary: Joe Rollinger met the team at the appointed time at the facility. Keith asked Joe if he had the requested feed ration, soil samples, and lagoon pH data. Joe was able to produce the soil sample results, but informed Keith that he would contact him once the other data was available for examination. Keith reviewed sections 7, 8, & 9 of the dairy’s AQMP with Joe and he helped Joe understand the best way of completing those sections. Keith asked Joe if he had made any improvements to the AQMP since the last visit in 2014, to which Joe responded in the negative. Joe also informed Keith there are currently no plans to invest in any significant infrastructure improvements in the near future. After the in-brief was completed Joe led the team on a tour of the dairy facility and of the calf holding facility located about 2-3 miles away.

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management:
   2.1.2 Feed Management:
2.1.3 Housing – Drylot Pens:

2.1.4 Manure Management:

2.1.5 Land Application:
2.1.6 Road Maintenance:

2.1.7 Milk Parlor & Holding Area:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Nutrition Management:

2.2.3 Housing – Drylot Pens:

2.2.4 Manure Management:

2.2.5 Land Application:

3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air
pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:

3.1 Nutrition Management:

3.2 Feed Management:

3.3 Housing – Drylot Pens:

3.4 Manure Management:

3.5 Land Application:
4. BMP Implementation Determination

4.1 Inspector Determination:

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - ☑ On-site record keeping;
  - ☑ Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - ☑ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington

Dustin Harrington      Date
Compliance & Enforcement Division Field Agent

4.2 Compliance Determination:

This determination is based on the following actions:

- ☑ Review of Dairy AQMP
- ☑ Review of records on-site
- ☑ Review of Best Management Practices being implemented

Compliance Certification:

Based on the above actions, I find:

- ☑ All BMPs listed in the AQMP were confirmed on inspection.
- ☐ Additional information requested.
- ☐ Another inspection is necessary to confirm implementation of BMPs.
- ☐ One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley

Keith Hurley      Date
Compliance & Enforcement Division Supervisor
Prins Dairy LLC  
C/o John Prins  
1690 Hudson Road  
Granger, WA 98938  

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) Evaluation  

Mr. Prins:  

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on October 6, 2015. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.  

If you have any questions concerning this letter please contact Dustin Harrington at (509) 834-2050 ext. 112.  

Keith M. Hurley  
Keith M. Hurley  
Compliance & Air Monitoring Division Supervisor  

Encl (2)
1. General Information:
   1.1 Facility
      Dairy Name: Udder View Dairy LLC
      Mailing Address: 31 Robinson Road, Grandview, WA 98930
      Facility Location: 31 Robinson Road, Grandview, WA 98930
      Contact Name: Marc DeJong
   1.2 Inspection
      Date and Time of Inspection: October 15, 2015 10:00am
      YRCAA Inspectors: Keith Hurley and Dustin Harrington
      Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
      Inspection Goals:
         A) To determine whether the BMPs listed in the Udder View Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
         B) Identify BMPs which are in need of improvement in order to achieve reasonable air emission reduction/prevention.
      Inspection Summary: On October 15, 2015 Keith and Dustin met Mark DeJong at the dairy. After the discussion, Mark led Keith and Dustin on the tour of the Dairy.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management:
      2.1.2 Feed Management:
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Drylot Pens:

2.1.5 Manure Management:

2.1.6 Land Application:

2.1.7 Road Maintenance:

2.1.8 Grazing Management:

2.2 Major Air Emissions Sources:
2.2.1 Nutrition Management:  
2.2.2 Feed Management:  
2.2.3 Housing – Drylot Pens:  
2.2.4 Manure Management:  
2.2.5 Land Application:  
2.2.6 Grazing Management:  
2.2.7 Land Application:  
2.2.8 Parlor & Holding Pens:  

3. Findings and recommendations:  
The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/revision of the following BMPs to achieve further reductions of air emissions:
3.2 Feed Management:

3.3 Housing – Drylot Pens:

3.4 Manure Management:

3.5 Milking Parlor:

3.6 Land Application:

4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - ☑ On-site record keeping;
  - ☑ Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - ☑ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington

Compliance & Enforcement Division Field Agent

October 21, 2015

4.2 Compliance Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site

Compliance Certification:

- Based on the above actions, I find:
  - ☑ All BMPs listed in the AQMP were confirmed on inspection.
  - ☐ Additional information requested (lagoon pH).
  - ☐ Another inspection is necessary to confirm implementation of BMPs.
  - ☐ One or more BMPs need immediate attention due to the current system conditions.
Keith M. Hurley
Keith Hurley
Compliance & Enforcement Division Supervisor

October 21, 2015
Date
**AQP BMP SCORE SHEET**

**Description of Score Sheet** - Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011).

**How to use this table**

1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2. Review the score (%) for each category (i.e., Nitrogen, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

**Overall Score (%) & Grade:**

<table>
<thead>
<tr>
<th>Good</th>
<th>Adequate</th>
<th>Poor - Needs improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-90%</td>
<td>90-80%</td>
<td>80-70%</td>
</tr>
</tbody>
</table>

**BMP #**

<table>
<thead>
<tr>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.1 Properly manage level of dietary protein (%CP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.2 Feed increased level or quality of starch in diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.3 Manage and minimize overfeeding of sulfur-containing feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.4 Practice group and/or stage of lactation feeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>60</td>
<td>100</td>
<td>NA</td>
<td>71</td>
<td>NA</td>
</tr>
<tr>
<td>II. Feed Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.1 Properly manage ensiled feedstuffs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.2 Store feed in a sheltered storage structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.3 Regularly remove spilled and unused feed from feeding area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.4 Manage or minimize feed mixing during windy times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>95</td>
<td>94</td>
<td>92</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>III. Milk Parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.1 Ensure proper ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.2 Use recycled (clean) or treated water for flushing parlor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.3 Use recycled (clean) or treated water for cleaning pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.4 Remove manure from holding area frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>94</td>
<td>NA</td>
<td>100</td>
<td>92</td>
<td>93</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IV. Housing - Freestall Barns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.1 Ensure proper ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.2 Bedding selection and management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.3 Treat recycled lagoon water used for flushing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.4 Remove manure from barns frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.5 Manure removal technology and efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.6 Alleyway floor texture and type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>#DIV/0!</td>
<td>NA</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>V. Housing - Drylot Pens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.1 Provide shade for cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.2 Siting of water trough within pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.3 (a) Remove manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.3 (b) Spread (harrow) manure frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.4 Use straw bedding in pen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.5 Incorporate wood chips into surface layer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.6 Utilize urease inhibitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.7 Surface moisture content management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.8 Knock down and remove fence line manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>84</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>82</td>
<td>84</td>
<td>80</td>
<td>NA</td>
</tr>
<tr>
<td>VI. Grazing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.1 Stock appropriate number of animals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.2 Use rotational grazing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.3 Move water and feeding areas frequently</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.4 Irrigate immediately after grazing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>NA</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VII. Manure Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.1 Manure solids - mechanical separation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.2 Manure solids - settling basin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.3 Lagoon or storage covers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.4 Scrub exhaust of enclosed waste containers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.5 Install and properly maintain a methane digester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.6 Surface aeration of lagoons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.7 Reduce the pH of lagoons and manure piles below 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.8 Encourage purple sulfur bacterial formation in anaerobic lagoons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.9 Properly manage composting of manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.10 Properly manage stockpiled manure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>71</td>
<td>NA</td>
<td>83</td>
<td>#DIV/0!</td>
<td>74</td>
<td>80</td>
<td>75</td>
<td>NA</td>
</tr>
<tr>
<td>VIII. Land Application - Manure or Chemical Fertilizer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.1 Apply N fertilizer below no-till residue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.2(a) Inject fertilizer/manure into soil at application (corn)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.2(b) Incorporate fertilizer/manure into soil within 24 hours of application (forage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.3 Apply nutrients according to agronomic recommendations based on soil and manure test results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.4 Do not over-irrigate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.5 Utilize cover crops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII.6 Apply during cool weather and on still rather than windy days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>96</td>
<td>100</td>
<td>94</td>
<td>91</td>
<td>95</td>
<td>93</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>IX. Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IX.1 Installation of windbreaks or shelterbelts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IX.2 Vehicle road condition management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IX.3 Engine selection and efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category Level of BMP Implementation (%)</td>
<td>20</td>
<td>NA</td>
<td>20</td>
<td>NA</td>
<td>20</td>
<td>47</td>
<td>NA</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>Overall Level of BMP Effectivity by Pollutant (%)</td>
<td>88</td>
<td>98</td>
<td>82</td>
<td>90</td>
<td>86</td>
<td>83</td>
<td>79</td>
<td>-</td>
</tr>
</tbody>
</table>
YAKIMMA REGIONAL CLEAN AIR AGENCY
BMP INSPECTION/SITE VISIT REPORT

1. General Information:
   1.1 Facility
      Dairy Name: Majestic Farms
      Mailing Address: 2320 Gurley Road, Outlook WA. 98938
      Facility Location: 2270 Gurley Road, Outlook, WA. 98938
      Contact Name: Mr. Nick Struikmans

   1.2 Inspection
      Date and Time of Inspection: October 1, 2015 at 9:45am
      YRCAA Inspectors: Keith Hurley and Dustin Harrington
      Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
      Inspection Goals:
      A) To determine whether the BMPs listed in the Majestic Farms Air Quality Management Plan (AQMP) are implemented effectively.
      B) Identify BMPs which are in need of improvement in order to achieve reasonable air emission reduction/prevention.
      Inspection Summary: The inspection began with Keith introducing himself and Dustin to Nick Struikmans. Keith presented a brief overview of the purpose and goals of the evaluation during the in-brief. Keith then proceeded to discuss each BMP utilized within the areas of nutrition, feed management, housing, manure management and land application. Upon completion of the in-brief Nick led Keith and Dustin on a walking tour of the facilities.

2. Specific Information
   2.1 Description of Systems Inspected:
      2.1.1 Nutrition Management:
      2.1.2 Feed Management:
      2.1.3 Housing – Drylot Pens:
2.1.4 Manure Management:

2.1.5 Land Application:

2.1.6 Road Maintenance:

2.1.7 Milk Parlor & Holding Area:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Housing – Drylot Pens:

2.2.3 Manure Management:

2.2.4 Land Application:

RCW 70.94.205...Information relating to processes or production unique to the owner or operator...
3. **Findings and recommendations:**

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive and/or easiest to implement, and Tier 3 being the most difficult/expensive. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation of the following BMPs to achieve further reductions of air emissions:

3.1 **Nutrition Management:**

3.2 **Feed Management:**

3.3 **Housing – Drylot Pens:**

3.4 **Manure Management:**

3.5 **Land Application:**
4. BMP Implementation Determination
   4.1 Inspector Determination
   This determination is based on the following actions:
   - Review of Dairy AQMP
   - On Site Inspection, including (check each aspect inspected):
     - On-site record keeping;
     - Best Management Practices being implemented;

   Inspector Certification:
   - Based on the above actions, I find:
     - ☑ No additional information needed.
     - ☐ Additional information requested (sulfur and starch content, lagoon pH).
     - ☐ The Dairy was unable to provide adequate information for a full inspection.

   Dustin Harrington
   Compliance & Enforcement Division Field Agent
   October 6, 2015

4.2 Compliance Determination
   This determination is based on the following actions:
   - Review of Dairy AQMP
   - Review of records on-site

   Compliance Certification:
   - Based on the above actions, I find:
     - ☑ All BMPs listed in the AQMP were confirmed on inspection.
     - ☐ Another inspection is necessary to confirm implementation of BMPs.
     - ☐ One or more BMPs need immediate attention due to the current system conditions.

   Keith M. Hurley
   Compliance & Enforcement Division Supervisor
   October 6, 2015
October 5, 2015

Majestic Farms
C/o Nick Struikmans
2320 Gurley Road
Outlook, WA 98938


Mr. Struikmans:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on October 1, 2015. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed, and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact Dustin Harrington at (509) 834-2050 ext. 112.

Keith M. Hurley
Keith M. Hurley
Compliance & Air Monitoring Division Supervisor
| Description of Score Sheet | Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). How to use this table: 1) Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2) Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made. |
| Category | Overall Score (%) & Grade | Good | Adequate | Poor - Needs improvement |
|          |                          | 100-90% | 90-80% | 80-70% | 70-60% | <60% |
|          |                          | A       | B       | C       | D       | E       |
| I. 1 Properly manage level of dietary protein (%CP) | 100 | 100 | 70 | #DIV/0! | 87 | NA | 100 | NA |
| I. 2 Feed increased level or quality of starch in diet | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA |
| I. 3 Manage and minimize overfeeding of sulfur-containing feed | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| I. 4 Practice group and/or stage of lactation feeding | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| II. 1 Properly managed ensiled feedstuffs | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| II. 2 Store feed in a sheltered storage structure | 86 | NA | 100 | 85 | 87 | NA | NA | NA |
| II. 3 Regularly remove spilled and unused feed from feeding area | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| II. 4 Manage or minimize feed mixing during windy times | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| III. 1 Ensure proper ventilation | 82 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| III. 2/3 Use recycled (clean) or treated water for flushing parlor | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| III. 4 Remove manure from holding area frequently | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| IV. 1 Provide shade for cattle | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| IV. 2 Siting of water trough within pen | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| IV. 4 Use straw bedding in pen | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| IV. 5 Utilize urea inhibitors | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| IV. 6 Siting of water trough within pen | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| V. 1 Stock appropriate number of animals | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| V. 2 Use rotational grazing | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| V. 3 Use recycled (clean) or treated water for cleaning pen | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VI. 1 Manure solids - mechanical separation | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| VI. 2 Manure solids - settling basin | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VII. 1 Manure solids - mechanical separation | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VII. 2 Manure solids - settling basin | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| VII. 4 Manure solids - mechanical separation | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VIII. 1 Apply N fertilizer below no-till residue | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VIII. 2(a) Incorporate nitrogen into soil at application (corn) | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VIII. 2(b) Incorporate fertilizer/manure into soil within 24 hours of application (forage) | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VIII. 3 Apply nutrients according to agronomic recommendations based on soil and manure test results | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VIII. 4 Do not over-irrigate | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VIII. 5 Utilize cover crops | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| VIII. 6 Apply during cool weather and on still rather than windy days | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| IX. 1 Installation of windbreaks or shelterbelts | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |
| IX. 2 Vehicle road condition management | 83 | 100 | 87 | 85 | 73 | 82 | 85 | NA |
| IX. 3 Engine selection and efficiency | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | NA | NA | NA |

<table>
<thead>
<tr>
<th>Facility</th>
<th>Newhouse Dairy</th>
<th>Date:</th>
<th>4/12/2016</th>
<th>(Version 8: 04/16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Level of BMP Effectivity by Pollutant (%)</td>
<td>88</td>
<td>98</td>
<td>81</td>
<td>81</td>
</tr>
</tbody>
</table>
1. General Information:
   1.1 Facility
   Dairy Name: Newhouse Dairy
   Mailing Address: 1760 Murray Road, Mabton, WA 98935
   Facility Location: 1760 Murray Road, Mabton, WA 98935
   Contact Name: David Newhouse

1.2. Inspection
   Date and Time of Inspection: April 26, 2016 at 9:30 am
   YRCAA Inspectors: Keith Hurley, Dustin Harrington
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A) To determine whether the BMPs listed in the Udder View Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
   B) Identify BMPs which are in need of improvement in order to achieve reasonable air emission reduction/prevention.
   Inspection Summary: Dave Newhouse met the YRCAA Inspection team on the date and time above. His brother, Ron Newhouse, is the actual owner of the dairy. During the in-brief Dave informed the team that Newhouse Dairy is in the middle of modernizing the facility.
2.1.3 Housing – Drylot Pens:

2.1.4 Manure Management:

2.1.5 Land Application:
2.1.6 Road Maintenance:

2.1.7 Milk Parlor & Holding Area:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Housing – Drylot Pens:

2.2.3 Manure Management:

2.2.4 Land Application:

2.2.5 Housing – Drylot Pens:

3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation of the following BMPs to achieve further reductions of air emissions:

3.1 Nutrition Management:

3.2 Feed Management:
3.3 Milk Parlor:

3.4 Housing – Drylot Pens:

3.5 Manure Management:

3.6 Land Application:

3.7 Others:
4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - ☑ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Dustin Harrington               Date
Compliance & Enforcement Division Field Agent

4.2 Compliance Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site

Compliance Certification:

- Based on the above actions, I find:
  - ☑ All BMPs listed in the AQMP were confirmed on inspection.
  - ☐ Additional information requested (lagoon pH).
  - ☐ Another inspection is necessary to confirm implementation of BMPs.
  - ☐ One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith Hurley                      Date
Compliance & Enforcement Division Supervisor
May 11, 2016

Newhouse Dairy
Ron Newhouse
1760 Murray Road
Mabton, WA 98935

Re: Best Management Practices (BMP) Site Visit Report

Mr. Newhouse:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on April 26, 2016. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed, and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions please feel free to contact me at 834-2050, ext. 105.

Sincerely,

Keith M. Hurley
Compliance & Enforcement Division Supervisor

Encl: Evaluation Report
BMP Score Sheet
1. General Information:

1.1 Facility

Dairy Name: Prins Dairy LLC; Facility #1 and #2
Mailing Address: 1690 Hudson Road, Granger, WA, 98932
Facility Location: 1690 Hudson Road, Granger, WA 98932
Contact Name: Mr. John Prins

1.2. Inspection

Date and Time of Inspection: October 6, 2015 at 10:00 AM
YRCAA Inspectors: Keith Hurley and Dustin Harrington
Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
Inspection Goals:
A) To determine whether the BMPs listed in the Prins Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
B) Identify BMPs which are in need of improvement in order to achieve reasonable air emission reduction/prevention.
Inspection Summary: Keith and Dustin met John Prins at his office at 10 am on October 6, 2015. Mr. Prins provided nutritional information for all feed rations, Soil Sample Testing results and Lagoon pH sample results. Keith asked Mr. Prins if he had plans to implement any new BMPs over the course of the next year and Mr. Prins stated that he always tries to improve the conditions on his facilities but he had no intentions to implement any new BMPs as of the date of the inspection. Prins dairy has two separate facilities. After the in-brief, Mr. Prins led Keith and Dustin on a tour of both.

2. Specific Information

2.1 Description of Systems Inspected:

2.1.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.2 Feed Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.3 Milk Parlor & Holding Area: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.1.4 Housing – Drylot Pens:

2.1.5 Manure Management:

2.1.6 Land Application:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Housing – Drylot Pens:

2.2.3 Manure Management:
3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation of the following BMPs to achieve further reductions of air emissions:

3.1 Nutrition Management: 
3.2 Feed Management: 
3.3 Housing – Drylot Pens: 
3.4 Manure Management: 
3.5 Land Application: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator
4. BMP Implementation Determination

4.1 Inspector Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - ☑ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Dustin Harrington
Compliance & Enforcement Division Field Agent
October 13, 2015

4.2 Compliance Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site

Compliance Certification:
- Based on the above actions, I find:
  - ☑ All BMPs listed in the AQMP were confirmed on inspection.
  - ☐ Additional information requested (lagoon pH).
  - ☐ Another inspection is necessary to confirm implementation of BMPs.
  - ☐ One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith Hurley
Compliance & Enforcement Division Supervisor
October 13, 2015
AQ BMP SCORE SHEET

Description of Score Sheet - Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). How to use this table:

1) Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2) Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (%CP)</td>
</tr>
<tr>
<td>I. 2</td>
<td>Feed increased level or quality of starch in diet</td>
</tr>
<tr>
<td>I. 3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
</tr>
<tr>
<td>I. 4</td>
<td>Practice group and/or stage of lactation feeding</td>
</tr>
<tr>
<td>II. 1</td>
<td>Properly manage ensiled feedstuffs</td>
</tr>
<tr>
<td>II. 2</td>
<td>Store feed in a sheltered storage structure</td>
</tr>
<tr>
<td>II. 3</td>
<td>Regularly remove spilled and unused feed from feeding area</td>
</tr>
<tr>
<td>II. 4</td>
<td>Manage or minimize feed mixing during windy times</td>
</tr>
<tr>
<td>III. 1</td>
<td>Ensure proper ventilation</td>
</tr>
<tr>
<td>III. 2/3</td>
<td>Use recycled (clean) or treated water for flushing parlor</td>
</tr>
<tr>
<td>III. 2/3</td>
<td>Use recycled (clean) or treated water for cleaning holding pen</td>
</tr>
<tr>
<td>III. 4</td>
<td>Remove manure from holding area frequently</td>
</tr>
<tr>
<td>IV. 1</td>
<td>Provide shade for cattle</td>
</tr>
<tr>
<td>IV. 2</td>
<td>Sitting of water trough within pen</td>
</tr>
<tr>
<td>IV. 3</td>
<td>Use straw bedding in pen</td>
</tr>
<tr>
<td>IV. 4</td>
<td>Incorporate wood chips into surface layer</td>
</tr>
<tr>
<td>IV. 5</td>
<td>Utilize urea inhibitors</td>
</tr>
<tr>
<td>IV. 6</td>
<td>Surface moisture content management</td>
</tr>
<tr>
<td>IV. 7</td>
<td>Knock down and remove fence line manure</td>
</tr>
<tr>
<td>V. 1</td>
<td>Stock appropriate number of animals</td>
</tr>
<tr>
<td>V. 2</td>
<td>Use rotational grazing</td>
</tr>
<tr>
<td>V. 3</td>
<td>Move water and feeding areas frequently</td>
</tr>
<tr>
<td>V. 4</td>
<td>Irrigate immediately after grazing</td>
</tr>
<tr>
<td>VI. 1</td>
<td>Manure solids - chemical separation</td>
</tr>
<tr>
<td>VI. 2</td>
<td>Manure solids - settling basin</td>
</tr>
<tr>
<td>VI. 3</td>
<td>Lagoon or storage covers</td>
</tr>
<tr>
<td>VI. 4</td>
<td>Scrub exhaust of enclosed waste containers</td>
</tr>
<tr>
<td>VI. 5</td>
<td>Install and properly maintain a methane digester</td>
</tr>
<tr>
<td>VI. 6</td>
<td>Reduce the pH of lagoons and manure piles below 6</td>
</tr>
<tr>
<td>VI. 7</td>
<td>Properly manage the composting of manure</td>
</tr>
<tr>
<td>VII. 1</td>
<td>Use rotational grazing</td>
</tr>
<tr>
<td>VII. 2</td>
<td>Properly manage stockedpile manure</td>
</tr>
<tr>
<td>VIII. 1</td>
<td>Apply N fertilizer below no-till residue</td>
</tr>
<tr>
<td>VIII. 2</td>
<td>Incorporate fertilizer/ manure into soil at application (corn)</td>
</tr>
<tr>
<td>VIII. 3</td>
<td>Do not over-irigate</td>
</tr>
<tr>
<td>VIII. 4</td>
<td>Utilize cover crops</td>
</tr>
<tr>
<td>VIII. 5</td>
<td>Use rotational grazing</td>
</tr>
<tr>
<td>IX. 1</td>
<td>Install windbreaks or shelterbelts</td>
</tr>
<tr>
<td>IX. 2</td>
<td>Vehicle road condition management</td>
</tr>
<tr>
<td>IX. 3</td>
<td>Engine selection and efficiency</td>
</tr>
</tbody>
</table>

Overall Score (%) & Grade: 80 B

<table>
<thead>
<tr>
<th>Category Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Level of BMP Effectivity by Pollutant (%)</td>
</tr>
</tbody>
</table>
# Dairy BMPs Quick Reference Table

<table>
<thead>
<tr>
<th>BMP # (NOTE)</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
<th>Methane (CH₄)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.1</td>
<td>Reduce the amount of dietary protein (N) in the ration to match, rather than exceed, the animal’s needs.</td>
<td>![Green]</td>
<td>![Blue]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.2</td>
<td>Increase the level of starch in the diet.</td>
<td></td>
<td>![Blue]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.3</td>
<td>Properly manage and minimize overfeeding of sulfur in the diet.</td>
<td>![Blue]</td>
<td>![Red]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.4</td>
<td>Practice phase-feeding.</td>
<td></td>
<td>![Green]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**I. Nutrition**

| II.1        | Properly cover and manage ensiled feedstuffs.                                           | ![Green]       | ![Green]             |                        |                                 |      |                        |                |              |
| II.2        | Store feed in a weatherproof storage structure.                                         |                | ![Green]             |                        |                                 |      |                        |                |              |
| II.3        | Remove spilled and unused feed from feeding areas on a regular basis.                   |                | ![Orange]            |                        |                                 |      |                        |                |              |
| II.4        | Do not mix feed during windy times.                                                     |                | ![Green]             |                        |                                 |      |                        |                |              |

**II. Feed Management**

| III.1       | Ensure proper ventilation.                                                             |                | ![Green]             |                        |                                 |      |                        |                |              |
| III.2       | Bedding selection and management.                                                      |                | ![Green]             |                        |                                 |      |                        |                |              |
| III.3       | Treat recycled lagoon water used for flushing.                                         |                | ![Green]             |                        |                                 |      |                        |                |              |
| III.4       | Remove manure from barns frequently.                                                   |                | ![Orange]            |                        |                                 |      |                        |                |              |
| III.5       | Modify alleyway floors to separate urine and feces.                                    |                | ![Green]             |                        |                                 |      |                        |                |              |

**III. Housing - Freestall Barns**

| IV.1        | Provide shade for cattle.                                                              |                | ![Green]             |                        |                                 |      |                        |                |              |
| IV.2        | Locate feed and water opposite in pens.                                               |                | ![Green]             |                        |                                 |      |                        |                |              |
| IV.3        | Remove and spread (harrow) manure frequently.                                         |                | ![Green]             |                        |                                 |      |                        |                |              |
| IV.4        | Use straw bedding in drylot pens.                                                     |                | ![Green]             |                        |                                 |      |                        |                |              |
| IV.5        | Incorporate wood chips in surface layer.                                              |                | ![Green]             |                        |                                 |      |                        |                |              |
| IV.6        | Use urease inhibitors.                                                                 |                | ![Blue]              |                        |                                 |      |                        |                |              |
| IV.7        | Surface moisture content management.                                                   |                | ![Orange]            |                        |                                 |      |                        |                |              |
| IV.8        | Knock down and remove fence line manure.                                              |                | ![Green]             |                        |                                 |      |                        |                |              |

**IV. Housing - Drylot Pens**

| V.1         | Stock appropriate number of animals.                                                   |                | ![Green]             |                        |                                 |      |                        |                |              |
| V.2         | Use rotational grazing.                                                                |                | ![Green]             |                        |                                 |      |                        |                |              |
| V.3         | Move water and feeding areas frequently.                                              |                | ![Green]             |                        |                                 |      |                        |                |              |
| V.4         | Irrigate immediately after grazing.                                                   |                | ![Green]             |                        |                                 |      |                        |                |              |

**V. Grazing Management**

![Dairy BMPs Quick Reference Table](image-url)
### Dairy BMPs Quick Reference Table

<table>
<thead>
<tr>
<th>BMP # (NOTE)</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
<th>Methane (CH₄)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI.1</td>
<td>Manure solids separation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.2</td>
<td>Lagoon or storage covers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.3</td>
<td>Scrub exhaust of enclosed waste containers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.4</td>
<td>Installation of an anaerobic digester.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.5</td>
<td>Surface aeration of lagoons.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.6</td>
<td>Reduce the pH of lagoons and manure piles.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.7</td>
<td>Encourage purple sulfur bacterial formation in anaerobic lagoons.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.8</td>
<td>Properly manage composted solid manure.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI.9</td>
<td>Properly manage stockpiled manure.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.1</td>
<td>Apply N fertilizer below no-till residue.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.2</td>
<td>Inject or incorporate fertilizer into soil within 24 hours of application.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.3</td>
<td>Apply nutrients according to agronomic recommendations based on soil test results.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.4</td>
<td>Do not over-irrigate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.5</td>
<td>Utilize cover crops.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.6</td>
<td>Apply during cool weather and on still rather than windy days.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII.7</td>
<td>Installation of windbreaks or shelterbelts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VI. Manure Management**

**VII. Land Application Fertilizer**

Table is based on "Livestock Best Management Practices (BMPs) for Emission Reductions" by Nichole M. Embertson, Ph.D. Whatcom Conservation District June, 2009

**NOTE:** The BMP numbers correspond to the numbers in Appendix C of the policy
October 24, 2011

Adam Dolsen  
Cow Palace Dairy Owner  
301 North 3rd Street  
Yakima, WA 98901

RE: Air Quality Best Management Practices (BMP) Score Sheet

Dear Mr. Dolsen:

As part of the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations Pilot Project a score sheet was prepared which critically examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included are the revisions that have been made to the site visit report dated June 24, 2011, as well as the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 107 or Hasan Tahat at ext. 105.

Sincerely,

Teresa Coons  
Engineer/Planner

Cc Keith Hurley, Compliance Division Supervisor  
Encl.
### AQ BMP SCORE SHEET

**Description of Score Sheet**
Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)” (YRCAA, 2011).

**How to use this table**
1) Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements.
2) Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row give the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category.
3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

**Overall Level of BMP Effectivity by Pollutant (%)**
- 90-100% Good
- 89-80% Adequate
- 79-70% Poor - Needs improvement
- <60% Poor - Needs improvement

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (%CP)</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>96</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>I. 2</td>
<td>Feed increased level or quality of starch in diet</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>96</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>I. 3</td>
<td>Practice group and/or stage of lactation feeding</td>
<td>90</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>96</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>II. 1</td>
<td>Properly manage ensiled feedstocks</td>
<td>87</td>
<td>NA</td>
<td>NA</td>
<td>85</td>
<td>86</td>
<td>91</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>II. 2</td>
<td>Store feed in a sheltered storage structure</td>
<td>87</td>
<td>NA</td>
<td>NA</td>
<td>85</td>
<td>86</td>
<td>91</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>II. 3</td>
<td>Regularly remove spilled and unused feed from feeding area</td>
<td>87</td>
<td>NA</td>
<td>NA</td>
<td>85</td>
<td>86</td>
<td>91</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>II. 4</td>
<td>Manage or minimize feed mixing during windy times</td>
<td>87</td>
<td>NA</td>
<td>NA</td>
<td>85</td>
<td>86</td>
<td>91</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>III. 1</td>
<td>Ensure proper ventilation</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>III. 2</td>
<td>Brelstion and selection management</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>III. 3</td>
<td>Treat recycled lagoon water used for flushing</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>III. 4</td>
<td>Remove manure from barns frequently</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IV. 1</td>
<td>Provide shade for cattle</td>
<td>87</td>
<td>NA</td>
<td>NA</td>
<td>85</td>
<td>86</td>
<td>91</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IV. 2</td>
<td>Sitting of water trough within pen</td>
<td>87</td>
<td>NA</td>
<td>NA</td>
<td>85</td>
<td>86</td>
<td>91</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IV. 3</td>
<td>Reduce the pH of lagoons and manure piles below 6</td>
<td>90</td>
<td>89</td>
<td>75</td>
<td>78</td>
<td>83</td>
<td>90</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>IV. 4</td>
<td>Use straw bedding in pen</td>
<td>90</td>
<td>89</td>
<td>75</td>
<td>78</td>
<td>83</td>
<td>90</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>IV. 5</td>
<td>Utilize urease inhibitors</td>
<td>90</td>
<td>89</td>
<td>75</td>
<td>78</td>
<td>83</td>
<td>90</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>IV. 6</td>
<td>Surface moisture content management</td>
<td>90</td>
<td>89</td>
<td>75</td>
<td>78</td>
<td>83</td>
<td>90</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>IV. 7</td>
<td>Remove manure from feeding area frequently</td>
<td>90</td>
<td>89</td>
<td>75</td>
<td>78</td>
<td>83</td>
<td>90</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>V. 1</td>
<td>Manure solids - mechanical separation</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>V. 2</td>
<td>Manure solids - settling basin</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>V. 3</td>
<td>Lagoon or storage covers</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>V. 4</td>
<td>Scrub exhaust of enclosed waste containers</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>V. 5</td>
<td>Install and properly maintain a methane digester</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>V. 6</td>
<td>Surface aeration of lagoons</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>V. 7</td>
<td>Reduce the pH of lagoons and manure piles below 6</td>
<td>90</td>
<td>89</td>
<td>75</td>
<td>78</td>
<td>83</td>
<td>90</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>V. 8</td>
<td>Properly manage the composting of manure</td>
<td>90</td>
<td>89</td>
<td>75</td>
<td>78</td>
<td>83</td>
<td>90</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>V. 9</td>
<td>Properly manage stockpiled manure</td>
<td>90</td>
<td>89</td>
<td>75</td>
<td>78</td>
<td>83</td>
<td>90</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>VII. 1</td>
<td>V. 10</td>
<td>Apply N fertilizer below no-till residue</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VII. 2</td>
<td>V. 11</td>
<td>Inoculate/maintain soil at application (corn)</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VII. 3</td>
<td>V. 12</td>
<td>Incorporate fertilizer/manure into soil within 24 hours of application (forage)</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VII. 4</td>
<td>V. 13</td>
<td>Apply nutrients according to agronomic recommendations based on soil and manure test results</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VII. 5</td>
<td>V. 14</td>
<td>Do not over-irrigate</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VIII. 1</td>
<td>V. 15</td>
<td>Use straw bedding in pen</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VIII. 2</td>
<td>V. 16</td>
<td>Install and properly maintain a methane digester</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VIII. 3</td>
<td>V. 17</td>
<td>Encourage purple sulfur bacterial formation in anaerobic lagoons</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VIII. 4</td>
<td>V. 18</td>
<td>Do not over-irrigate</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VIII. 5</td>
<td>V. 19</td>
<td>Utilize urease inhibitors</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>VIII. 6</td>
<td>V. 20</td>
<td>Use straw bedding in pen</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IX. 1</td>
<td>V. 21</td>
<td>Properly manage the composting of manure</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IX. 2</td>
<td>V. 22</td>
<td>Properly manage stockpiled manure</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IX. 3</td>
<td>V. 23</td>
<td>Increasing the level or quality of starch in diet</td>
<td>90</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Overall Level of BMP Effectivity by Pollutant (%)</td>
<td>90</td>
<td>89</td>
<td>85</td>
<td>89</td>
<td>90</td>
<td>87</td>
<td>89</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
1. General Information:
   1.1 Facility
   Dairy Name: Serenity Acres Dairy.
   Mailing Address: 90013 East Reata Road, Kennewick, WA 99338
   Facility Location: 16041 Yakima Valley Highway, Zillah, WA 98953
   Contact Name: Mr. Kevin den Hoed

1.2. Inspection
   Date and Time of Inspection: April 12, 2016 at 9:30 am
   YRCAA Inspectors: Keith Hurley, Dustin Harrington, Kelsey Sanford

To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.

   Inspection Goals:
   A) To determine whether the BMPs listed in the Udder View Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
   B) Identify BMPs which are in need of improvement in order to achieve reasonable air emission reduction/prevention.

   Inspection Summary: Kevin den Hoed met Keith, Dustin, and Kelsey at the dairy on April 12, 2016 at 9:30 am. Kevin led the team into an office for the in-brief, which was led by Keith. Kevin presented Keith with pH sample results for both lagoons, results for the Dairy’s soil sampling, and feed ration data.
2.1.2 Feed Management:

2.1.3 Housing – Drylot Pens:

2.1.4 Manure Management:

2.1.5 Land Application:
BMP Inspection/ Site visit
Serenity Acres Dairy
Page 3 of 5

2.1.6 Road Maintenance:

2.1.7 Milk Parlor & Holding Area:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Housing – Drylot Pens:

2.2.3 Manure Management:

2.2.4 Land Application:

2.2.5 Land Application:

3. Findings and Recommendations:

The following are the finding and the recommendations for altering current best management practices in order to further reduce air pollutant emission potential. It is understood that some of the finding/recommendations may be more expensive or more difficult to implement than others. These differences may be identified with tier levels, Tier 1 being the least expensive and/or easiest to implement and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, that a Tier 2 or Tier 3 BMP be implemented. A BMP selection matrix based on air pollutant source and tier level mitigation is provided in Appendix F of the policy. In addition, a summarized table for these tiers is included in
this report for easy quick reference. This may be used to help determine which BMP finding to implement first. YRCAA finds implementation of the following BMPs will achieve further reductions of air emissions and shall be implemented:

3.1 Nutrition Management:

3.2 Housing – Drylot Pens:

3.3 Land Application:
4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - [x] On-site record keeping;
  - [x] Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - [x] No additional information needed.
  - □ Additional information requested.
  - □ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Dustin Harrington
Compliance & Enforcement Division Field Agent

4.2 Compliance Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site

Compliance Certification:
- Based on the above actions, I find:
  - [x] All BMPs listed in the AQMP were confirmed on inspection.
  - □ Additional information requested (lagoon pH).
  - □ Another inspection is necessary to confirm implementation of BMPs.
  - □ One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith Hurley
Compliance & Enforcement Division Supervisor
1. General Information:

1.1 Facility
   Dairy Name: Smeenk Brothers Dairy LLC & # 2.
   Mailing Address: 451 Wendell Phillips Rd. Sunnyside, WA 98944
   Facility Location: 451 Wendell Phillips Rd. Sunnyside, WA 98944
   Contact Name: Mr. Scott Smeenk, Mr. Jason Smeenk

1.2. Inspection
   Date and Time of Inspection: August 25, 2015 at 12:00 PM
   YRCAA Inspectors: Keith Hurley and Dustin Harrington
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A) To determine whether the BMPs listed in the Smeenk Brothers Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.
   B) Identify BMPs which are in need of improvement in order to achieve reasonable air emission reduction/prevention.
   Inspection Summary: The inspection began with the evaluation team being introduced to Scott and Jason Smeenk. Keith presented a brief overview of the purpose and goals of the evaluation during the in-brief. Scott Smeenk

2. Specific Information

2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management:
   2.1.2 Feed Management:
   2.1.3 Housing – Drylot Pens:
3. Finding and Recommendations:
The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the
least expensive and/or easiest to implement and Tier 3 being the most difficult/expensive. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP may be indicated. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation of the following BMPs to achieve further reductions of air emissions:

<table>
<thead>
<tr>
<th>3.1 Nutrition Management:</th>
<th>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 Feed Management:</td>
<td>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</td>
</tr>
<tr>
<td>3.3 Housing – Dry Lot Pens:</td>
<td>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</td>
</tr>
<tr>
<td>3.4 Manure Management:</td>
<td>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</td>
</tr>
<tr>
<td>3.5 Land Application:</td>
<td>RCW 70.94.205...Information relating to processes or production unique to the owner or operator</td>
</tr>
</tbody>
</table>
4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - No additional information needed.
  - Additional information requested.
  - The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington
Compliance & Enforcement Division Field Agent
August 31, 2015

4.2 Compliance Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site
- Review of inspection notes

Engineer Certification:

- Based on the above actions, I find:
  - BMPs listed in the AQMP were confirmed on inspection.
  - Additional information requested
  - Another inspection is necessary to confirm implementation of BMPs.
  - One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Compliance & Enforcement Division Supervisor
August 31, 2015
Smeenk Brother’s Dairy LLC & #2  
Scott Smeenk  
451 Wendell Philips Rd.  
Sunnyside, WA 98944

Re: Best Management Practices (BMP) Site Visit Report

Mr. Smeenk:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on August 25, 2015. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed, and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions please feel free to contact me at 834-2050, ext. 105 or Ms. Mylene Gueneron at ext. 107.

Sincerely,

Keith M. Hurley  
Compliance & Enforcement Division Supervisor

Encl: Evaluation Report  
BMP Score Sheet
Re: Corrected Report

Mr. Smeenk:

Please find enclosed a corrected copy of your report. The word “not” has been deleted from the last line of section 2.1.3

Respectfully,

Keith M. Hurley
Compliance & Enforcement Division Supervisor

Encl: Evaluation Report
AQ BMP SCORE SHEET

Description of Score Sheet - Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011).

How to use this table
1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2. Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Nutrition</td>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>II. Feed Management</td>
<td></td>
<td>73</td>
<td>NA</td>
<td>NA</td>
<td>64</td>
<td>62</td>
<td>65</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>III. Milking Parlor</td>
<td></td>
<td>82</td>
<td>NA</td>
<td>100</td>
<td>85</td>
<td>87</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>IV. Housing - Freestall Barns</td>
<td></td>
<td>67</td>
<td>60</td>
<td>63</td>
<td>65</td>
<td>69</td>
<td>67</td>
<td>65</td>
<td>NA</td>
</tr>
<tr>
<td>V. Housing - Drylot Pens</td>
<td></td>
<td>73</td>
<td>NA</td>
<td>77</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>NA</td>
</tr>
<tr>
<td>VI. Grazing Management</td>
<td></td>
<td>82</td>
<td>NA</td>
<td>70</td>
<td>69</td>
<td>73</td>
<td>81</td>
<td>60</td>
<td>NA</td>
</tr>
<tr>
<td>VII. Manure Management</td>
<td></td>
<td>20</td>
<td>NA</td>
<td>20</td>
<td>20</td>
<td>56</td>
<td>NA</td>
<td>#DIV/0!</td>
<td></td>
</tr>
<tr>
<td>VIII. Land Application - Manure or Chemical Fertilizer</td>
<td></td>
<td>Overall Level of BMP Effectiveness by Pollutant (%)</td>
<td>77</td>
<td>85</td>
<td>74</td>
<td>74</td>
<td>69</td>
<td>80</td>
<td>-</td>
</tr>
</tbody>
</table>
June 13, 2016

Snipes Mountain Dairy, Inc.
C/o Henry R. Haak
PO Box 636
Outlook, WA 98938

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) Evaluation

Mr. Haak:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on May 24, 2016. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 108.

Dustin Harrington
Dustin Harrington
Compliance Inspector

Encl: Site Visit Report
Score Sheet
**AQ BMP SCORE SHEET**

**Description of Score Sheet** - Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011). **How to use this table** - 1) Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2) Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3) Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (%CP)</td>
</tr>
<tr>
<td>I. 2</td>
<td>Feed increased level or quality of starch in diet</td>
</tr>
<tr>
<td>I. 3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
</tr>
<tr>
<td>I. 4</td>
<td>Practice group and/or stage of lactation feeding</td>
</tr>
</tbody>
</table>

**Category Level of BMP Implementation (%)**

<table>
<thead>
<tr>
<th>Category</th>
<th>BMP #</th>
<th>Level of BMP Implementation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>I. 1</td>
<td>87 B</td>
</tr>
<tr>
<td></td>
<td>I. 2</td>
<td>85 B</td>
</tr>
<tr>
<td></td>
<td>I. 3</td>
<td>80 D</td>
</tr>
<tr>
<td></td>
<td>I. 4</td>
<td>87 B</td>
</tr>
</tbody>
</table>

**Overall Score (%) & Grade**

<table>
<thead>
<tr>
<th>Category</th>
<th>Overall Score (%) &amp; Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>87 B</td>
</tr>
<tr>
<td>Housing - Freestall Barns</td>
<td></td>
</tr>
<tr>
<td>Housing - Debed Pens</td>
<td></td>
</tr>
<tr>
<td>Grazing Management</td>
<td></td>
</tr>
<tr>
<td>Manure Management</td>
<td></td>
</tr>
<tr>
<td>Land Application - Manure or Chemical Fertilizer</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**How to use this** - AQ BMPs implementation levels vary from "A" to "E" depending on number of animals, volume of live stock, nutrients generated, number of acres covered.

**Overall Level of BMP Effectivity by Pollutant (%)**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Overall Level of BMP Effectivity by Pollutant (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia (NH₃)</td>
<td>92 NA</td>
</tr>
<tr>
<td>Nitrous Oxide (N₂O)</td>
<td>97 NA</td>
</tr>
<tr>
<td>Oxides of Nitrogen (NOₓ)</td>
<td>84 NA</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOCs)</td>
<td>88 NA</td>
</tr>
<tr>
<td>Odor</td>
<td>92 NA</td>
</tr>
<tr>
<td>Particulate Matter (PM)</td>
<td>88 NA</td>
</tr>
<tr>
<td>Hydrogen Sulfide (H₂S)</td>
<td>92 NA</td>
</tr>
<tr>
<td>Methane (CH₄)</td>
<td>86 NA</td>
</tr>
<tr>
<td>Overall</td>
<td>87 B</td>
</tr>
</tbody>
</table>
1. General Information:

1.1 Facility

Dairy Name: Snipes Mountain Dairy
Mailing Address: P.O. Box 636, Outlook, WA 98938
Facility Location: 211 Nichols Road, Outlook, WA 98938
Contact Name: Mr. Henry R. Haak

1.2. Inspection

Date and Time of Inspection: May 24, 2016 at 9:30 am
YRCAA Inspectors: Keith Hurley, Dustin Harrington, Kelsey Sanford
Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
Inspection Goals:
A) To determine whether the BMPs listed in the Snipes Mountain Dairy Air Quality Management Plan (AQMP) are implemented effectively.
B) Identify BMPs which can be improved in order to achieve reasonable air emission reduction/prevention.

Inspection Summary: The inspection began with Henry Haak meeting the team at 9:30 am on May 24, 2016 at the dairy. Keith reviewed the dairy’s AQMP with Mr., Haak. He also instructed Mr. Haak on the correct way to complete sections 7, 8, and 10 of the AQMP. Mr. Haak informed Keith that he did not have the requested data for Feed Rations, Composted Manure pH, Lagoon pH, and soil sample results on site but that he would notify Keith as soon as he received the data from the providers. (The data was made available for review at the dairy on June 10, 2016.) Mr. Haak also informed Keith the

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

Haak then led the team on a tour of the facility and the team viewed

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2. Specific Information

2.1 Description of Systems Inspected:

2.1.1 Nutrition Management:

2.1.2 Feed Management:
2.1.3 Milk Parlor & Holding Area:

2.1.4 Housing – Freestall/Flush Pens:

2.1.5 Housing – Drylot Pens:

2.1.6 Manure Management:
3. Findings and Recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:
3.1 Nutrition Management:

3.2 Feed Management:

3.3 Housing – Drylot Pens:

3.4 Manure Management:

4. BMP Implementation Determination

4.1 Inspector Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - ☑️ On-site record keeping;
  - ☑️ Best Management Practices being implemented;

Inspector Certification:

- Based on the above actions, I find:
  - ☑️ No additional information needed.
  - ☐ Additional information requested.
  - ☐ The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington  
Dustin Harrington  
Compliance & Enforcement Division Field Agent
4.2 Compliance Determination

This determination is based on the following actions:

- Review of Dairy AQMP
- Review of records on-site
- Review of Best Management Practices being implemented

Compliance Certification:

- Based on the above actions, I find:
  - All BMPs listed in the AQMP were confirmed on inspection.
  - Additional information requested.
  - Another inspection is necessary to confirm implementation of BMPs.
  - One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley
Keith Hurley
Compliance & Enforcement Division Supervisor
<table>
<thead>
<tr>
<th>Category Level of BMP Implementation (%)</th>
<th>#DIV/0!</th>
<th>NA</th>
<th>#DIV/0!</th>
<th>#DIV/0!</th>
<th>#DIV/0!</th>
<th>NA</th>
<th>#DIV/0!</th>
<th>NA</th>
<th>#DIV/0!</th>
<th>NA</th>
<th>NA</th>
<th>#DIV/0!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Level of BMP Effectivity by Pollutant (%)</td>
<td>85</td>
<td>97</td>
<td>82</td>
<td>92</td>
<td>83</td>
<td>84</td>
<td>91</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. General Information:
   1.1 Facility
   Dairy Name: Swager Dairy.
   Mailing Address: 2221 Alexander Exit, Grandview, WA 98930
   Facility Location: 2221 Alexander Exit, Grandview, WA 98930
   Contact Name: Dale Swager

   1.2. Inspection
   Date and Time of Inspection: June 14, 2016 at 9:30am
   YRCAA Inspectors: Keith Hurley, Dustin Harrington, Kelsey Sanford
   Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the YRCAA Air Quality Management and Best Management Practices for Dairy Operations Policy.
   Inspection Goals:
   A) To determine whether the BMPs listed in the Swager Dairy Air Quality Management Plan (AQMP) are implemented effectively.
   B) Identify BMPs which can be improved in order to achieve reasonable air emission reduction/prevention.
   Inspection Summary: The team arrived at the dairy and met Dale Swager at 9:35am on June 14, 2016. Mr. Swager informed Keith that there were no improvements scheduled for the dairy’s listed BMPs within the AQMP or any new BMPs the dairy had implemented since the last visit. Dale answered that there were none to both questions. Dale was able to provide some of the requested feed, soil, compost, and lagoon data but informed Keith that he would provide the remaining data after he obtained it. Dale then led the team on a tour of the facility.

2. Specific Information
   2.1 Description of Systems Inspected:
   2.1.1 Nutrition Management:
   2.1.2 Feed Management:
   2.1.3 Housing – Drylot Pens:
2.1.4 Manure Management:

2.1.5 Land Application:

2.1.6 Road Maintenance:

2.1.7 Milk Parlor & Holding Area:

2.2 Major Air Emissions Sources:

2.2.1 Feed Management:

2.2.2 Nutrition Management:

2.2.3 Housing – Drylot Pens:
2.2.4 Manure Management:

2.2.5 Land Application:

2.2.6 Housing – Drylot Pens:

2.2.7 Land Application:

3. Findings and Recommendations:
The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/adjustment of the following BMPs to achieve further reductions of air emissions:

3.1 Nutrition Management:

3.2 Feed Management:

3.3 Housing – Drylot Pens:

3.4 Manure Management:
4. **BMP Implementation Determination**

4.1 **Inspector Determination:**
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping:
  - Best Management Practices being implemented;

**Inspector Certification:**
- Based on the above actions, I find:
  - No additional information needed.
  - Additional information requested.
  - The Dairy was unable to provide adequate information for a full inspection.

*Dustin Harrington*  
Dustin Harrington      Date  
Compliance & Enforcement Division Field Agent

4.2 **Compliance Determination:**
This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site
- Review of Best Management Practices being implemented

**Compliance Certification:**
- Based on the above actions, I find:
  - All BMPs listed in the AQMP were confirmed on inspection.
  - Additional information requested.
  - Another inspection is necessary to confirm implementation of BMPs.
  - One or more BMPs need immediate attention due to the current system conditions.
July 22, 2016

Swager Dairy
C/o Dale Swager, Owner
2221 Alexander Ext.
Grandview, WA 98930-9640

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) Evaluation

Mr. Swager:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on June 14, 2016. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact me at (509) 834-2050 ext. 108.

Dustin Harrington
Dustin Harrington
Compliance Inspector

Encl: Site Visit Report
Score Sheet
February 22, 2013

Brain Bosma  
Dairy Owner  
Maple Grove Dairy, LLC  
3620 Independence Rd.  
Sunnyside, WA 98944

RE: Best Management Practices (BMP) Inspection and Score Sheet Reports

Dear Mr. Bosma:

On June 27, 2012 our office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations. The evaluation consisted of an on-site inspection to determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement. A copy of the inspection report is enclosed for your review.

In addition, a score sheet was prepared which examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 105. Thank you.

Best regards,

Hasan M. Tahat, Ph.D.  
Engineering and Planning Division Supervisor
February 22, 2013

Rosalio Brambila, Manager
Sunnyside Dairy
4581 Maple Grove Road
Sunnyside, WA 98944

RE: Best Management Practices (BMP) Inspection and Score Sheet Reports.

Dear Mr. Brambila:

On July 13, 2012 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations. The evaluation consisted of an on-site inspection to determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement. A copy of the inspection report is enclosed for your review.

In addition, a score sheet was prepared which examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 105. Thank you.

Best regards,

Hasan M. Tahat, Ph.D.
Engineering and Planning Division Supervisor
February 25, 2013

Keith Golob, Owner
Golob Dairy, Inc.
500 Nelson Rd.
Granger, WA 98932

RE: Best Management Practices (BMP) Inspection and Score Sheet Reports.

Dear Mr. Golob:

On July 3, 2012 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations. The evaluation consisted of an on-site inspection to determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement. A copy of the inspection report is enclosed for your review.

In addition, a score sheet was prepared which examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 105. Thank you.

Best regards,

Hasan M. Tahat, Ph.D.
Engineering and Planning Division Supervisor
February 27, 2013

Dan DeGroot, Owner
Skyridge Farm
4701 Scoon Rd.
Sunnyside, WA 98944

RE: Best Management Practices (BMP) Inspection and Score Sheet Reports

Dear Mr. DeGroot:

On July 18, 2012 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations. The evaluation consisted of an on-site inspection to determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement. A copy of the inspection report is enclosed for your review.

In addition, a score sheet was prepared which examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 105. Thank you.

Best regards,

Hasan M. Tahat, Ph.D.
Engineering and Planning Division Supervisor
February 28, 2013

Henry Bosma
Dairy Owner
Liberty and Suncrest Farms, LLC
4300 Beam Road
Zillah, WA 98953

RE: Best Management Practices (BMP) Inspection and Score Sheet Reports.

Dear Mr. Bosma:

On November 28, 2012 this office conducted a BMP inspection of your facility in accordance with the Yakima Regional Clean Air Agency’s (YRCAA) Air Quality Management Policy (AQMP) and Best Management Practices (BMPs) for Dairy Operations. The evaluation consisted of an on-site inspection to determine whether the BMPs listed in the AQMP are being fully implemented and identify BMPs which are in need of improvement. A copy of the inspection report is enclosed for your review.

In addition, a score sheet was prepared which examines the best management practices that were observed at your facility. The score sheet highlights areas of strength and weakness in terms of air emission reductions at your facility. A copy of the score sheet is enclosed for your review.

Also included is the Air Quality BMP Selection Matrix which discusses a tiered approach to selecting BMPs for air emission reduction based on cost and ease of implementation.

If you have any questions please feel free to contact me at 509-834-2050, ext. 105. Thank you.

Best regards,

Hasan M. Tahat, Ph.D.
Engineering and Planning Division Supervisor
Yakima Regional Clean Air Agency
Tuxedo Dairy
C/o Kevin Den Hoed
90013 E. Reata
Kennewick, WA 99338

Re: Best Management Practices (BMP) Site Visit Report

Mr. Den Hoed:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office attempted to conduct an evaluation of the Tuxedo Dairy Facility on September 17, 2015. Upon arrival it was discovered that the facility was in the process of being sold to you, and that the sale of the facility should be completed on or about October 1, 2015. The undersigned decided that it was in the best interest to conduct the above mentioned site visit after the official transfer of the ownership of the facility to your possession. We have asked that you formally contact this agency within two weeks of the transfer so that a site visit can be scheduled. I am enclosing a YRCAA Ownership Change Form for you to complete and return to this agency once the sale is complete.

We are sincerely looking forward to partnering with you and your facility to protect and enhance the quality of Yakima County’s air resources. If you have any questions please feel free to contact me at 834-2050, ext. 112.

Sincerely,

Keith M. Hurley

Keith M. Hurley
Compliance & Enforcement Division Supervisor
### Description of Score Sheet

Scores entered in the gray boxes range from 0 to 5 for each pollutant (5 being optimum implementation). Scores for each BMP are based on the visual evaluation and/or documentation of practices assessed during inspections. For descriptions of BMPs listed, refer to the document "Descriptions of Best Management Practices (BMPs)" (YRCAA, 2011).

1. Review your overall score. A score above 80% is good, between 70-80% is adequate, and below 70% is poor and should be evaluated for improvements. 2. Review the score (%) for each category (i.e., Nutrition, Housing, etc.) and each pollutant (i.e., Ammonia, Nitrous Oxide, etc.). The values listed in the "Category Level of BMP Implementation (%)" row gives the relative effectiveness of the BMPs for that specific category as implemented at your facility at the time of inspection. A value below 70% should be evaluated and you should consider making improvements in that category. 3. Look at the individual score given to each BMP. Use these to identify the areas where improvements can be made.

### Best Management Practice

<table>
<thead>
<tr>
<th>BMP #</th>
<th>Best Management Practice</th>
<th>Ammonia (NH₃)</th>
<th>Nitrous Oxide (N₂O)</th>
<th>Hydrogen Sulfide (H₂S)</th>
<th>Volatile Organic Compounds (VOCs)</th>
<th>Odor</th>
<th>Particulate Matter (PM)</th>
<th>Methane (CH₄)</th>
<th>Oxides of Nitrogen (NOₓ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. 1</td>
<td>Properly manage level of dietary protein (%CP)</td>
<td>90</td>
<td>80</td>
<td>80</td>
<td>96</td>
<td>NA</td>
<td>86</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>I. 2</td>
<td>Feed increased level or quality of starch in diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. 3</td>
<td>Manage and minimize overfeeding of sulfur-containing feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. 4</td>
<td>Practice group and/or stage of lactation feeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Overall Score (% & Grade)

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Adequate</th>
<th>Poor &lt; Needs Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Score</td>
<td>84</td>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>

### Category Level of BMP Implementation (%)

- **Nutrition**
  - Category Level of BMP Implementation (%)
    - I. 1: 90
    - I. 2: NA
    - I. 3: 80
    - I. 4: 96

- **Feed Management**
  - Category Level of BMP Implementation (%)
    - II. 1: 87
    - II. 2: NA
    - II. 3: 85
    - II. 4: 86

- **Manure Management**
  - Category Level of BMP Implementation (%)
    - III. 1: 94
    - III. 2: NA
    - III. 3: 100
    - III. 4: 92

- **Housing - Freestall Barns**
  - Category Level of BMP Implementation (%)
    - IV. 1: 94
    - IV. 2: NA
    - IV. 3: 100
    - IV. 4: 93

- **Housing - Divot Pens**
  - Category Level of BMP Implementation (%)
    - V. 1: 88
    - V. 2: 100
    - V. 3: 90
    - V. 4: 90

- **Grazing Management**
  - Category Level of BMP Implementation (%)
    - VI. 1: 95
    - VI. 2: 94
    - VI. 3: NA
    - VI. 4: 100

- **Mature Management**
  - Category Level of BMP Implementation (%)
    - VII. 1: 66
    - VII. 2: NA
    - VII. 3: 88
    - VII. 4: 72
    - VII. 5: 80
    - VII. 6: 80

- **Land Application - Manure or Chemical Fertilizer**
  - Category Level of BMP Implementation (%)
    - VIII. 1: 81
    - VIII. 2: 82
    - VIII. 3: 70
    - VIII. 4: 73
    - VIII. 5: 75
    - VIII. 6: 81

- **Other**
  - Category Level of BMP Implementation (%)
    - IX. 1: 60
    - IX. 2: 58
    - IX. 3: NA

**Overall Level of BMP Effectivity by Pollutant (%)**

- Overall Score (% & Grade)
  - 84

**Note:** Certain information from dairies and feedlots limited to number of animals, volume of livestock, nutrients generated, number of acres covered.
1. General Information:

1.1 Facility

Dairy Name: Udder View Dairy LLC
Mailing Address: 31 Robinson Road, Grandview, WA 98930
Facility Location: 31 Robinson Road, Grandview, WA 98930
Contact Name: Marc DeJong

1.2 Inspection

Date and Time of Inspection: October 15, 2015 10:00am
YRCAA Inspectors: Keith Hurley and Dustin Harrington

Inspection Rationale: To determine reasonable and effective techniques for the prevention and reduction of air pollution emissions from dairy operations in accordance with the Yakima Regional Clean Air Agency (YRCAA) Air Quality Management and Best Management Practices for Dairy Operations Policy.

Inspection Goals:

A) To determine whether the Best Management Practices (BMPs) listed in the Udder View Dairy LLC Air Quality Management Plan (AQMP) are implemented effectively.

B) Identify BMPs which are in need of improvement in order to achieve reasonable air emission reduction/prevention.

Inspection Summary: On October 15, 2015 Keith and Dustin met Mark DeJong at the dairy. Mark supplied Keith with some initial feed ration data. Keith requested, and received, additional feed ration data for all cows on October 19.

After the discussion, Mark led Keith and Dustin on the tour of the Dairy.

2. Specific Information

2.1 Description of Systems Inspected:

2.1.1 Nutrition Management: RCW 70.94.205... Information relating to processes or production unique to the owner or operator

2.1.2 Feed Management: RCW 70.94.205... Information relating to processes or production unique to the owner or operator
2.1.3 Milk Parlor & Holding Area: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.4 Housing – Drylot Pens: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.5 Manure Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.6 Land Application: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.7 Road Maintenance: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.1.8 Grazing Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2 Major Air Emissions Sources:

2.2.1 Nutrition Management: RCW 70.94.205...Information relating to processes or production unique to the owner or operator
2.2.2 Feed Management: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.3 Housing – Drylot Pens: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.4 Manure Management: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.5 Land Application: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.6 Grazing Management: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.7 Land Application: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

2.2.8 Parlor & Holding Pens: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator

3. Findings and recommendations:

The following techniques for improving current best management practices may further reduce air pollutant emission potential. It is understood that some of the techniques may be more expensive or more difficult to implement than others. Cost levels of BMPs are identified by their respective Tier levels; Tier 1 being the least expensive/easiest to implement, and Tier 3 being the most expensive/difficult. It is recommended that if a Tier 1 BMP is already in place but considered ineffective for reducing certain air pollutants, a Tier 2 or Tier 3 BMP be considered for implementation. A BMP selection matrix based on air pollutant source and tier level mitigation is found in Appendix F of the AQM Policy on the YRCAA website. This agency recommends implementation/revision of the following BMPs to achieve further reductions of air emissions:

3.1 Nutrition Management: 

RCW 70.94.205...Information relating to processes or production unique to the owner or operator
3.2 Feed Management:  
3.3 Housing – Drylot Pens:  
3.4 Manure Management:  
3.5 Milking Parlor:  
3.6 Land Application:

4. BMP Implementation Determination
4.1 Inspector Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- On Site Inspection, including (check each aspect inspected):
  - On-site record keeping;
  - Best Management Practices being implemented;

Inspector Certification:
- Based on the above actions, I find:
  - [ ] No additional information needed.
  - [ ] Additional information requested.
  - [ ] The Dairy was unable to provide adequate information for a full inspection.

Dustin Harrington  
Dustin Harrington  
Compliance & Enforcement Division Field Agent  
October 21, 2015

4.2 Compliance Determination
This determination is based on the following actions:
- Review of Dairy AQMP
- Review of records on-site

Compliance Certification:
- Based on the above actions, I find:
  - [ ] All BMPs listed in the AQMP were confirmed on inspection.
  - [ ] Additional information requested (lagoon pH).
  - [ ] Another inspection is necessary to confirm implementation of BMPs.
  - [ ] One or more BMPs need immediate attention due to the current system conditions.

Keith M. Hurley  
October 21, 2015  
Keith Hurley  
Compliance & Enforcement Division Supervisor  
Date
October 21, 2014

Udder View Dairy LLC
Mark DeJong
31 Robinson Road,
Grandview, WA 98930

Re: Yakima Regional Clean Air Agency (YRCAA) Dairy Best Management Practices (BMP) evaluation visit.

Mr. DeJong:

In accordance with the YRCAA Air Quality Management Policy, dated July 1, 2013, this office conducted an evaluation of your facilities’ use of BMPs in reducing air pollution emissions on October 15, 2015. The evaluation consisted of a site visit to determine whether the BMPs listed in your Air Quality Management Plan (AQMP) are being fully implemented, and to identify practices which are in need of improvement. A score sheet, which examines the BMPs that were observed at your facility, was completed, and highlights areas of strength and weaknesses in terms of air emission reductions at your facility. A copy of the evaluation report and a score sheet are attached for your records.

If you have any questions concerning this letter please contact Dustin Harrington at (509) 834-2050 ext. 112.

Keith M. Hurley
Keith M. Hurley
Compliance & Enforcement Division Supervisor

Encl (2)