| HQG Pellet Mill Visit Date: | June 11, 2020 |
| :--- | :--- |
| Primary Owner/Operator: | Roy Farms |
| Physical Address of Facility: | 1045 Desmarais Rd., Moxee, <br> WA 98936 |
| Pellet Mill Contact: | Andy Roy, Kyle Charvet |
| Contact's Email Address: | andy@royfarms.com, <br> kyle@royfarms.com |
| Contact's Email Phone: | $509-452-3494$ KC |


| HQG Attendee \& Brewery |  |
| :--- | :--- |
| Alec Mull-Founders |  |
| Kyle Charvet-Roy |  |
|  |  |
|  |  |
|  |  |



## Operations Description:

The Roy's are exceptional at process and employee protocol management with complete HACCP plan.
Environmentally sustainability focused operation. Full size pellet mill capable of complete traceability and food safe operation of farmer to brewer with a medium sized blending capability. Nothing gets run until complete quality and MRL info is accepted. Full employee training, supervision and complete PPE requirements for all employees. Separate break and restroom facilities with touchless operation. Only pellet mill operators in the world to be SQF certified. Multiple magnets and only food grade lubricants. Covered conveyance throughout with a heavy material separator. Lighting is acceptable but should be updated and improved. Employee safety focus. This mill is a little older and sees less operation than the Roy Walters Rd. facility, but with the exception of medium size blending tank, is capable of operating at similar speeds and capacities. It's a simple, fundamental operation with little automation that can be run well by skilled operators and produce a fine pellet.

## Areas of Concern:

It is not clear if the lighting was low due to being off season, but it should be more illuminated. Bale handling could be modified to keep bales away from potential foreign materials from foot or forklift traffic, by elevating bales onto conveyance so as not to be handled along the floor. This method of bale handling is typical and an overall concern I have in general, not just here.

## Recommendations:

Larger blending capacities would assist in large lot homogenization. Some more automated filling equipment (like the form fill and seal machines used in some mills) to remove human participation and atmosphere regulation of bags would be swell (I do believe this can be run well and food safe however.) Additional updated lighting. Some evaluation of bale handling techniques to eliminate possible contact with foot and forklift traffic areas.

## Hop Quality Group: Hop Pellet Mill Survey

Facility Address- 1045 Desmarais Road, Moxee WA 98936 (Desserault Facility)
Primary Owner/Operator- Roy Farms, Inc.
Manufacturer of Hammer Mill- CPM
Date of manufacture- 2008
Motor size in KW or HP- 200 HP
Manufacturer of Pellet Mill- CPM
Date of manufacture- 1998
Motor size in KW or HP- 150 HP
Blending capacity
Bale breaker bin capacity- 4 Bales
Powder tank capacity- 5 Bales
Blender type (Ribbon or Conical)- Ribbon
Throughput capacity (per 24 hours)- N/A
Magnet locations- See attached HACCP plans
Pellet diameter and number of die sizes owned- $3 / \mathbf{8}^{\prime \prime}$ dia ; min. 5 dies
Target temperature of pellet: Temp Range: $110^{\circ} \mathrm{F}-135^{\prime} \mathrm{F}$
Cooling method- Liquid Nitrogen on Die Face
Vacuum hard pack or soft pack and flush gas type- $\approx 1$ " elasticity pull on mylar; Nitrogen Flushed
Quality tests performed- Pellet temperature \& density checked once per hour, hammermill grind once per shift, 'rub checks' once per hour

Laminate foil integrity tests performed and frequency of tests- Bag \& Seal integrity inspections on line once per hour

Any third party certification- Global GAP (Field thru Bale); Salmon Safe, OK Kosher, SQF (Pellets Only), Oregon Tilth (Organic)

## Additional Comments:

|  |
| :--- |
| Third Party Certification, if any? |
| Global GAP (Field thru Bale); Salmon Safe, OK Kosher, SQF (Pellets Only), Oregon Tilth (Organic) |

Additional Comments about the operation?
The Roy's are world class farmers with a world class traceability platform. They excel at employee training and process execution. Some investments in their automated pellet filling to remove the human component, perhaps wrapping the fill area, evaluation of bale infeed to bale breaker method, and some additional lighting can make the Roy's world class pellet mil operators at the Desserault Rd. plant as well.





Roy Farms, Inc
HACCP PROCESS - HOP PELLETING
Process Flow Chart - Desserault Facility

only)

Organic Rolled Oats
Mineral Oil
Hot Water

## Packaging Materials

 Plastic Shrink Wrap Cardboards Corner Boards Wooden Pallets


## PRODUCT DESCRIPTION SHEET Type 90 Hop Pellets

| Common Name: | Type 90 Hop Pellets |
| :---: | :---: |
| Process Method: | Hop cones are removed from the hop bine, dried, cooled, milled, and compressed into pellets from baled hops and/or loose hop cones. Hop pellets contain approximately $90 \%$ of the original dried and cleaned hop cones. The composition of aroma and bittering components solely depends on the variety. According to variety, hop pellets are typically categorized as; aroma hop pellets, bitter hop pellets, and dual purpose hop pellets. |
| Quality Statement: | All hop pellets are to be processed and delivered as single variety pellets. The mixing of varieties or pellets, or the mixing of conventional and organic varieties and pellets is not allowed. |
| Appearance: | Free flowing cylindrical pellets, with a bulk density of $\sim 530 \mathrm{~g} / \mathrm{l}+/-30 \mathrm{~g} / \mathrm{l}$. The pellets must be free of impurities and foreign materials, and be uniform in color. Hop pellets typically contain a minimal amount of hop fines generated during processing. |
| How Is It To Be Used: | Commonly used as an ingredient for the brewing of beer. Distributed to brewers and marketers for further processing. |
| Type Of Packaging: | Bulk packaged in a vacuum sealed, food grade Mylar aluminum lined foil bag inside a corrugated cardboard box |
| Shelf Life: | Best used within 3 yrs. from production when stored in a cool, dry place at temperatures $26-34^{\circ} \mathrm{F}$ |
| Where Will It Be Sold: | To both domestic and international brewers and marketers for further processing. |
| Labeling Instructions: | TYPE 90 HOP PELLETS / <variety> / <lot number> / <crop year> / <\% alpha acid> / <harvest date> / <pellet date> / <net wt.>/<Kosher logo> / <Salmon-Safe logo> / <Roy Farms logo> /Total KgA <KgA> / PRODUCT OF USA |
| Special Distribution Control: | Not to be shipped with non-food products, hazardous materials, chemicals, and/or products which exude strong aromatic characteristics. |

