| HQG Pellet Mill Visit Date: | June 11, 2020 |
| :--- | :--- |
| Primary Owner/Operator: | Roy Farms |
| Physical Address of Facility: | 401 Walters Rd, Moxee, WA <br> 98936 |
| Pellet Mill Contact: | Andy Roy, Kyle Charvet |
| Contact's Email Address: | andy@royfarms.com, <br> kyle@royfarms.com |
| Contact's Email Phone: | $509-952-1714$ AR, 509-452- <br> 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. 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 in the world to be SQF certified. Multiple magnets and only food grade lubricants. Covered conveyance throughout. Lighting is acceptable but could be updated. Employee safety focus with updated safety measures installed recently. Capable of adequate blending and they do some contract tolling for others. The Roys also employ a unique operation of "Harvest Fresh" pellets which basically skips the baling process. Loose hop cones get conveyed directly from the cooling floor to the pellet operation. Eliminated is all the compression, handling, cooling, re-handling and bale breaking that hops would typically go through to get to a brewers pellet. A pellet is produced $36-48$ hours after that hop is harvested. About half of their pellet mill production in done using this process and it is to contracted volumes.

## Areas of Concern and Recommendations:

Lighting could be improved and updated. When not doing harvest fresh pellets, bales are handled on the ground with forklift delivery to manual handling into bale breaker (this is very common throughout the industry). Would like to see some investigation to include bales on conveyance to address any floor sanitation concern possibilities from foot or forklift traffic. The bale breaker does not have a heavy material separator or rock trap due to conveyance stylepossibility of rocks or other foreign material making it into product does exist. The bag filling part of the operation relies on an employee to fulfill manually. There exists and inherent possibility of foreign material inclusion from this person. Adequate supervision and PPE inhibits this, but automating that process would be ideal and eliminate that possibility entirely. The modern form fill and seal machines would address this concern.

## Hop Quality Group: Hop Pellet Mill Survey

Facility Address- 401 Walters Road, Moxee, WA 98936
Primary Owner/Operator- Roy Farms, Inc.
Manufacturer of Hammer Mill- CPM
Date of manufacture- 1998
Motor size in KW or HP- 150 HP
Manufacturer of Pellet Mill- CPM
Date of manufacture- 2008
Motor size in KW or HP- 150 HP
Blending capacity
Bale breaker bin capacity- 4 Bales
Powder tank capacity- 12 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- $3 / 8^{\prime \prime}$ dia ; min. 5 dies each location
Target temperature of pellet: Temp Range: $110^{\prime} \mathrm{F}-135^{\circ} \mathrm{F}$
Cooling method- Ambient air and Liquid Nitrogen on Die Face
Vacuum hard pack or soft pack and flush gas type- $\approx 1^{\prime \prime}$ 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 online once per hour

Standard label information- See Product Description Sheet
Frozen storage capacity- $\approx 6,000,000$ LBS
Any third party certification- Global GAP (Field thru Bale); Salmon Safe, OK Kosher, SQF (Pellets Only), Oregon Tilth (Organic)

## Additional Comments:

The Roy's are world class farmers with a world class traceability platform, and an awesome concept in Harvest Fresh pellets. They excel at employee training and process execution. Some investments in pellet filling to remove the human component, evaluation of bale infeed to bale breaker method, heavy material separation and some additional lighting can make the Roy's world class pellet mil operators as well.

Global GAP (Field thru Bale); Salmon Safe, OK Kosher, SQF (Pellets Only), Oregon Tilth (Organic)

Additional Comments about the operation? Thanks for your dedication to Quality and food and worker safety!




Ray Farms，Inc
HACCF PRDCESS－H DF FELETING
Fiocess Flow Chart－Row Farms Maln Facility


| Diy 4a』camad |
| :---: |
| MagratithroughoulFadithan |


| Whata <br> Ta Iア・aめ II |
| :---: |




## 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. |

