



September 29, 2019

Submitted via Public Comment Form: <http://aq.ecology.commentinput.com/?id=x2MVU>

Ms. Laurie Hulse-Moyer
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Subject: Formal Comment on State Implementation Plan Revision: Wallula Maintenance Plan for Particulate Matter (PM10)

Dear Ms. Hulse-Moyer,

The J.R. Simplot Company (Simplot) owns and operates the Simplot Feeders cattle feedlot ("the feedlot") identified in the State Implementation Plan (SIP) for the Wallula Maintenance Area. Simplot appreciates the opportunity to provide comments to identify potential discrepancies in parameters used for the emission inventory for the feedlot in the SIP, provide general comments for Ecology's consideration, and reiterate our concern regarding Ecology's PM10 emission factor for feedlots in the State of Washington.

Emission Inventories

Feedlot Headcount

On page 3, section 1.4, the SIP states, "[t]here is a large beef cattle feedlot with a capacity of about 88,000 head (recent levels have been in the 42,000 head range)..." Presumably, this statement is in reference to the Simplot Feeders cattle feedlot. The feedlot is limited to 80,000 head under Approval Order No. 18AQ-E018 dated March 5, 2018. Simplot requests the Department of Ecology (Ecology) ensure the 80,000 headcount parameter is used for emission inventory calculations related to feedlot capacity. Over the six years feedlot level has averaged 38,000 head; the reported headcount for emission registration purposes were 35,899 in 2014, 31,439 in 2016, and 42,379 in 2018.

On page 24 in appendix A-2 of the SIP, Ecology has used an average daily head count of 56,635 for the 2014 emission inventory, however, Simplot reported average daily head count at 35,899 for 2014 in the annual registration. Simplot estimates the reduced head count parameter reduces the daily PM10 emission rate from 1,826 lb/day to 1,118 lb/day.

PM10 Emission Comparison from 2002 to 2014

On page 27, Table 8 of the SIP, Ecology acknowledges Simplot Feeders was counted as a small source in 2002 with PM10 emissions estimated at approximately 219 lb/day. Ecology also acknowledges an updated emission factor was applied for feedlots as a change that had occurred between the 2002 and 2014 emission inventories (page 27, section 3.1.1 of the SIP).

Ecology's updated beef feedlot emission factor was not finalized or required for use by Simplot Feeders until the 2016 Annual Emission Inventory, however, Ecology has retroactively applied that factor to the 2014 data. Technically, this wasn't a change that occurred in the 2002-2014



time-frame, however, Simplot assumes Ecology's intent for this approach was to ensure an "apples to apples" comparison for 2014 to future projections in 2020 and beyond. Simplot requests this same approach be applied to the 2002 data as well, at least for informational purposes in the SIP.

With Ecology's current comparison of emissions from 2002 to 2014 in the SIP, it inaccurately identifies a substantial emission increase for the feedlot, when in fact cattle headcount decreased during this time period. The 2002 headcount was 39,186, the 2014 headcount was 35,899. When Simplot estimates emissions for 2002, applying Ecology's updated beef feedlot emission factor to the 2002 data, the daily PM10 emission estimate is approximately 1,500 lb/day. Using this "apples to apples" comparison for 2002 to 2014, these emission calculations demonstrate a decrease in emissions of approximately 400 lb/day rather than the 1,600 lb/day increase identified in Table 7 of the SIP.

The values presented in this comment are summarized below for ease of comparison. If a comparison of emissions from 2002 to 2014 is presented in the SIP, it is critical to demonstrate that the emissions from the feedlot have not increased. Simplot does not believe the emission change from 2002 to 2014 is accurately portrayed in the SIP.

	2002 Emission Inventory Headcount	2002 PM10 Emission (lb/day) ²	2014 Emission Inventory Headcount	2014 PM10 Emission (lb/day)	PM10 Emission Increase from 2002 - 2014
Simplot's Calculation	39,186	1,552	35,899	1,118	- 434
SIP Values	39,186 ¹	219	56,635	1,826	1,607

Table Note 1: Simplot assumes Ecology used a headcount of 39,186 for the 2002 emissions since that was the value reported in the Annual Emission Inventory for 2002.

Table Note 2: Simplot assumed Ecology used the previously accepted emission factor of 5.27 lb PM10/1000 head-day resulting in 219 lb/day for PM10 rather than Ecology's updated feedlot emission factor of 54.25 lb PM10/1000head-day. Simplot applied Ecology's updated feedlot emission factor (and allowable control efficiencies) to the 2002 data to calculate daily PM10 emissions, which resulted in 1,552 lb/day.

Simplot was not contacted by Ecology for information on emission inventory development for the SIP but welcomes the opportunity to collaborate with Ecology to assure accurate parameters and methodologies are utilized to characterize the feedlot operation.

General Comments

Characterization of Feedlot Operations

The SIP states an increase in activity occurred at the feedlot between 2002 and 2014 (page 28, section 3.1.1) with the addition of new equipment for corn and hay, however,



the new hay equipment was installed in 2015 and the new corn equipment was installed in 2018. Simplot believes it is inaccurate to state an increase in activity occurred at the feedlot during this period due to the installation of the equipment. While there was a decrease in average headcount in the early 2000's at the facility, the headcount over the last several years has remained relatively constant and has not reached the same levels experienced in the late 1990s.

Fugitive Dust Control Plan Inclusion

Simplot appreciates Ecology's consistency of including Fugitive Dust Control Plans in the SIP. Simplot supports Ecology's recommendation to include the updated Fugitive Dust Control Plan for the feedlot in the SIP.

Woodstove Emissions

On page 34, section 3.2, Ecology states "woodstoves are used most heavily in the wintertime, they do not contribute to the pounds per season day totals. Therefore, Ecology did not include emission from woodstoves in either the inventory ... or projections. Ecology did not include residential wood combustion in the EI because it is only a small source on days with large PM10 concentration." However, Ecology also states in Section 3.1.3 on page 30 that "PM10 maximums occur in the winter and summer." While Ecology did not include woodsmoke in the previous maintenance plan, Simplot recommends Ecology reconsider inclusion of woodsmoke emissions to assure a complete data set for wintertime emissions. Simplot's experience in operating in other PM10 maintenance areas is that woodsmoke can have impacts to PM10 emissions and programs to manage residential woodsmoke can have noticeable impacts for the community.

Beef Feedlot PM10 Emission Factor

Simplot has previously provided comment on Ecology's updated beef feedlot emission factor and requests that if Ecology determines a change in emission factor is necessary for a given source, particularly if that source is included in a SIP, that the emission factor updates are based on science and incorporates the knowledge and expertise from impacted stakeholders and industry professionals. A summary of Simplot's previous comments regarding the updated beef feedlot emission factor are provided below:

- Comments were provided in January 2017¹ in response to Ecology's data request for the 2016 Annual Emission Inventory. In those comments, Simplot recommended Ecology engage with the Washington Cattle Feeders Association and individual feedlots to collaboratively develop science-based emission factors for the State of Washington rather than relying upon literature research and determining studies conducted in the Midwest can represent operations in Washington state. Simplot also indicated additional literature sources were available and it was unclear if those sources were evaluated by Ecology.

¹ Letter dated January 31, 2017 from Simplot to Mr. Brian Prisock, Washington Department of Ecology, "2016 Annual Emissions Inventory – Simplot Pasco Feedlot".



- In July 2017², during Ecology's rule-making for registration fees, Simplot provided comment on the use of the emission factor, that Ecology conducted their review of data without adequate input from the industry or industry experts and recommended Ecology suspend use of the emission factor and initiate a collaborative effort with industry to identify appropriate updates, as necessary, to emission factors.
- Ecology resumed the rulemaking process for registration fees and in August 2018³ during the public comment period for those fees, both Simplot and the Washington Cattle Feeders Association recommended Ecology work with the Association and the feedlots on appropriate PM10 emission factor development.

Ecology has presented various literature sources containing PM10 emission factors derived for feedlots (for pens and roads combined) - nearly an order of magnitude separates the range of emission factors identified. The updated emission factor Ecology requires for use at beef feedlots is 54.25 lb/1000 head-day⁴; prior to the 2016 annual emissions inventory Ecology used an emission factor of 5.27 lb/1000 head-day for beef feedlots.

Considering all of the comments Simplot and the Washington Cattle Feeders Association have provided regarding Ecology's updated beef feedlot emission factor, Simplot recommends Ecology pursue a similar approach put forth by Ecology with development of the "*Fugitive Dust Control Plan and Best Management Practices for Cattle Feeding Operations*" (Department of Ecology, Publication 18-02-033, October 2018) and work with the Washington Cattle Feeders Association for identification of appropriate, science-based emission factors for beef feedlots in Washington state.

Thank you for the opportunity to provide comments and your consideration of our comments. If you have any questions, please feel free to contact me Krista.Kinsey@Simplot.com or 208-780-7241.

Regards,



Krista Kinsey
Environmental Engineering Manager

CC: Steve Maggard, J.R. Simplot Company

² Letter dated July 11, 2017 from Simplot to Ms. Brenda Smits and Ms. Joanna Ekrem, Washington Department of Ecology, "Air Quality Fee Rule, WAC 173-100 and 173-455".

³ Letter dated August 3, 2018 from Simplot to Mr. Jean-Paul Huys, Washington Department of Ecology, "Formal Comment on Rulemaking, Revising Chapters 173-455 and 173-400 WAC".

⁴ Ecology allows for use of control efficiencies in combination with the emission factor. Simplot's operations allow for use of two of the three the controls resulting a 35% control efficiency for the feedlot.

