



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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April 8, 2020

Robert Thode, President
Fire Mountain Farms, Inc.
856 Burnt Ridge Road
Onalaska, WA 98570

Re: Emerald and FMF Delisting and Treatment Variance Petitions Approved

Dear Robert Thode:

The Washington State Department of Ecology (Ecology) received and reviewed the Emerald Kalama Chemical, LLC (Emerald) and Fire Mountain Farms, Inc. (FMF) petitions to delist a one-time amount up to 20,100 cubic yards of U019 and U220 mixed industrial wastewater biological solids (IWBS)/wastewater treatment plant solids (WTPS) from the list of federal hazardous and state dangerous wastes at three FMF facilities: Burnt Ridge located at 856 Burnt Ridge Road, Onalaska, WA; Newaukum Prairie located at 349 State Route 508, Chehalis, WA; and Big Hanaford located at 307 Big Hanaford Road, Centralia, WA. Emerald and FMF submitted identical petitions at the same time to the United States Environmental Protection Agency (EPA) Region 10.

The EPA has primary authority for delisting hazardous wastes regulated by 40 Code of Federal Regulations (CFR) Part 261. Ecology cannot delist federally listed waste independently of the EPA. However, Ecology may grant exemptions to specific wastes upon petition from the generator. In cases of federally listed dangerous waste, EPA approval of a delisting petition must occur before Ecology can grant the exemption for that waste.

The EPA has approved the petitions for delisting with specific requirements for maintaining the delisting exclusion. EPA approval of the delisting petitions was published as a final rule on April 8, 2020 (copy enclosed), and became effective on that date.

In accordance with Dangerous Waste Regulations, Chapter 173-303, Washington Administrative Code (WAC), Ecology reviewed the petition and provided public notice of the request, receiving one comment from Lewis County. The comment and Ecology's response are documented in Appendix B of the final Fact Sheet (copy enclosed).

Your petitions demonstrate that the mixed IWBS/WTPS wastes are not regulated as dangerous waste by the Washington State criteria of WAC 173-303-100.

Ecology grants your request to exempt the waste described in your petitions from regulation as dangerous waste. Ecology's approval is conditioned on Emerald and FMF's continued compliance with the EPA conditions for exclusion as described in the federal regulation regarding this delisting.

Additionally, Emerald and FMF also submitted joint petitions for a site specific variance from the land disposal treatment standards for acetaldehyde in the mixed wastes. The land disposal restrictions (LDRs) in the dangerous waste rules require dangerous wastes to meet certain treatment levels before being disposed in a landfill (WAC 173-303-140). Treatment levels are either concentration-based or technology-based standards. The state dangerous waste regulations include provisions that allow a facility to petition for a variance of the land disposal treatment standards. Ecology is authorized to make decisions independent of EPA on petitions requesting site specific variances of the land disposal treatment standards. Thus, Emerald and FMF only submitted petitions for approval from Washington State for the treatment variance petitions. The state provisions for treatment variance petitions are found in WAC 173-303-140(2), which incorporates parts of 40 CFR 268.44 by reference.

Emerald and FMF provided information in the treatment variance petitions to show why the combustion treatment standard is not appropriate for the mixed IWBS/WTPS wastes. See the enclosed Fact Sheet for Ecology's evaluation of the treatment variance petitions.

Ecology grants your request to exempt the waste described in your petitions from regulation under the land disposal treatment standards for acetaldehyde in the mixed wastes. Ecology's approval is conditioned on Emerald and FMF's continued compliance with the following requirements:

- 1) Emerald and FMF must sample the mixed IWBS/WTPS wastes at all three FMF locations for acetaldehyde using the Toxicity Characteristic Leaching Procedure (TCLP) analysis by collecting three representative grab samples from each storage unit before the waste is removed from the storage units. Emerald and FMF must include this sampling as part of the written sampling plan required by the EPA conditions for delisting as described in the federal regulation.
- 2) Sample results in the mixed IWBS/WTPS wastes must meet the alternative treatment standards for acetaldehyde which Ecology developed from EPA's Delisting Risk Assessment Software (DRAS) model. The standards are 54.2 mg/L, 24.9 mg/L, and 51.1 mg/L for the Burnt Ridge, Newaukum Prairie, and Big Hanaford storage units, respectively. These standards are based on the results of the TCLP analysis in the model.
- 3) Emerald and FMF must provide Ecology with the acetaldehyde sampling results within ten (10) days after receiving the final results from the laboratory.
- 4) If the alternative treatment standards for acetaldehyde in the mixed IWBS/WTPS wastes are exceeded, Ecology may require Emerald and FMF to conduct additional sampling to better define the volume of waste that exceeds the standards.

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- 5) For mixed IWBS/WTPS wastes that exceed the alternative treatment standards for acetaldehyde, Ecology will require that Emerald and FMF meet the original technology-based standard of high temperature organic destruction, such as combustion.

Please contact Peter Lyon at (360) 407-6381 or peter.lyon@ecy.wa.gov with any questions or concerns.

Sincerely,



Laurie G. Davies

Solid Waste Management Program Manager

Enclosures

cc: Chris Wrobel, Emerald
Bill Teitzel, Lewis County Public Health & Social Services
Jonathan Thompson, Attorney General's Office
Peter Lyon, Ecology
Greg Gould, Ecology
Dave Bartus, EPA