



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



JANET

T. MILLS
MELANIE LOYZIM

GOVERNOR
COMMISSIONER

April 26, 2021

Tyler Player
Player Holdings, LLC
29 Second Street, Suite 2
Presque Isle, ME 04769

RE: Steam Fracturing Trial Project Temporary Approval Request

Dear Mr. Player:

This letter is to authorize the temporary installation and use of a natural gas fired boiler, two pressure vessels, and a pellet press to be used in conjunction with currently licensed equipment to trial the production of biomass-based pellets appropriate for use as a coal substitute. The trial is to be conducted at the Player Holdings, LLC (MaineFlame) facility in Ashland starting on or about May 15, 2021, and concluding on or before July 31, 2021, as requested in a letter to the Department dated April 9, 2021. In accordance with 06-096 CMR 115, Appendix B, Section A, *Insignificant Activities*, (114), temporary air emission related activities may be deemed categorically exempt from air licensing requirements with approval from the Department. The Department bases this authorization on the following facts:

- The temporary boiler will be a natural gas fired boiler with a heat input capacity of less than 10 MMBtu/hour. Fuel will be provided as compressed natural gas trucked to the site for this trial.
- Each of the two pressure vessels will have a capacity of 1,500 gallons.
- Biomass fed to the pressure vessels will be pressurized with injected steam at or around 450 psig for a period of 5 minutes to fracture the material.
- Once a cycle in a pressure vessel is completed, pressurized gases will be released into a steam expansion tank and then into a direct-contact water spray steam condenser. The remaining noncondensable gases will then be released to atmosphere.
- After the pressure in each pressure vessel is released, the processed material will be removed from the vessel and fed into a screw press to remove excess water before entering the drying process already addressed in the facility’s air emission license.

AUGUSTA	BANGOR	PORTLAND	PRESQUE ISLE
17 STATE HOUSE STATION	106 HOGAN ROAD, SUITE 6	312 CANCO ROAD	1235 CENTRAL DRIVE, SKYWAY PARK
AUGUSTA, MAINE 04333-0017	BANGOR, MAINE 04401	PORTLAND, MAINE 04103	PRESQUE ISLE, MAINE 04769
(207) 287-7688 FAX: (207) 287-7826	(207) 941-4570 FAX: (207) 941-4584	(207) 822-6300 FAX: (207) 822-6303	(207) 764-0477 FAX: (207) 760-3143

website: www.maine.gov/dep

- A temporary pellet press will be used to produce the final product for the duration of the testing period.
- The identified temporary equipment shall not be operated outside the timeframe between May 15, 2021, and July 31, 2021. After this period, the equipment is to be disconnected and removed from use.
- MaineFlame shall limit the throughput of process material through this equipment to 1,000 oven dried tons.
- During the trial, MaineFlame will monitor and record the following during operation of the temporary equipment. All data collected will be accompanied by the date, time, and, if applicable, the duration of each measurement.
 - Raw wood feed rate into the pressure vessels, noting quantity, species, and moisture content of the material.
 - Temperature, pressure, and wood residence time in the pressure vessels.
 - Quantity and moisture content of the processed material exiting the pressure vessels.
 - Boiler operating parameters including fuel usage, steam temperature and pressure, and feedwater usage.
 - Temperature and volume of gases released from the steam condenser.
 - Cooling water usage in the steam condenser.
 - Water discharged from the steam condenser, including quantity and quality (e.g., temperature, pH, TSS, BOD).
 - VOC content and volume of the effluent released from the condenser.
 - Gaseous emissions from the condenser, including VOC, PM (filterable and condensable), and lighter carbon chain HAP such as formaldehyde, benzene, acrolein, and xylenes using a FTIR (Method 320). This measurement is not expected to be on a continuous basis; however, enough data will be gathered to be considered representative.
 - Gaseous emissions from the existing drying process including VOC, PM (filterable and condensable), NO_x, CO, and lighter carbon chain HAP such as formaldehyde, benzene, acrolein and xylenes using a FTIR (Method 320). This measurement is not expected to be done on a continuous basis; however, enough data will be gathered to be considered representative.
 - If there is a mixture of raw wood and processed material from the temporary equipment being fed to the dryer, the percentage each component comprises of the total feedstock during this testing.
 - Each time the trial equipment or licensed equipment used as part of the trial is operated, including the date, time, and duration of each period of operation.

Letter to Tyler Player
(April 26, 2021)
Page 3 of 3

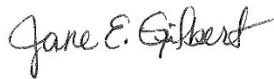
Based on the information above, the Department authorizes the trial as a temporary insignificant activity pursuant to 06-096 C.M.R. ch. 115, Appendix B, Section A.114.

Within 30 days after the end of the authorized time period, MaineFlame shall provide a report to the Department summarizing trial activities and results, including all measurements and data associated with this trial, as described above.

Please also note, this temporary authorization for air emission equipment does not satisfy or preclude the requirement of any other state and local licenses, permits, or certifications. This approval is concerning air-related emissions only and neither addresses requirements of any other regulatory program nor conveys approval under any other program. It is recommended that MaineFlame coordinate with the Department's Bureau of Water Quality for potential monitoring requirements such as pH, BOD, and TSS of the effluent produced as a byproduct of the trial.

If you have any questions, please feel free to contact your air licensing project manager, Chris Ham, at chris.ham@maine.gov or (207) 287-9931.

Sincerely,



Jane E. Gilbert, P.E.
Air Licensing Unit Manager

cc: Jim Gramlich [Maine DEP – NMRO]
Chris Ham [Maine DEP]