



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604**

OCT 04 2019

DATE:

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Big River Resources Galva, LLC, Galva, Illinois

FROM: Albana Bega, Environmental Engineer
AECAB (MI/WI)

THRU: Sarah Marshall, Section Chief
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: Big River Resources Galva, LLC

Facility Location: 1100 SE Second Street, Galva, Illinois

Date of Inspection: August 6, 2019

EPA Inspector(s):

1. Albana Bega, Environmental Engineer
2. Manojkumar Patel, Environmental Engineer

Other Attendees

1. Ralph J. Peel, Plant Manager, Big River Resources Galva, LLC (Big River)
2. Shane Costenson, Environmental Safety Coordinator, Big River
3. Travis Sparks, Production Coordinator, Big River

Contact Email Address: ralph.peel@bigriverresources.com

Purpose of Inspection: Responding to a citizen odor complaint

Facility Type: Ethanol production from corn

Regulations Central to Inspection: SIP, NSPS

Arrival Time: 10:15

Departure Time: 18:15

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Credentials Presented
- ☒ CBI warning to facility provided

The following information was obtained verbally from Mr. Peel unless otherwise noted.

Process Description: Big River is an ethanol production facility that has been in operation since 2009. The plant is permitted to produce up to 140 million gallons per year (MGPY) of ethanol from corn and is currently operating at around 130 MGPY. The plant also produces distillers dried grains with solubles (DDGS) and corn oil. Big River utilizes seven fermenters, one beer well for fermentation and two sets of two dryers to produce DDGS from mash. Two natural gas-fired thermal oxidizers (TOs) and one scrubber control emissions from the beer well and dryers. A bag house controls particulate matters from the hammer mill. Denatured ethanol is loaded out via rail and tanker truck. Loadout emissions are controlled by a flare.

Staff Interview: The facility has approximately 60 employees and operates 24 hours per day, 7 days per week. The plant is shut down for maintenance twice a year for about 2-5 days in spring (March) and fall (August), respectively.

TOUR INFORMATION

EPA toured the facility: Yes

The facility was operating normally at the time of inspection.

Data Collected and Observations: The following were observed during the tour:

- Fermenters, beer well
- CO₂ scrubber
- Hammermill area/associated bag house
- Rail loading area
- Tank farm
- TOs/control room
- Dryers and distillation process area

Photos and/or Videos: were taken during the inspection.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

- Screenshot of the TO 1 control panel; claimed by Big River as confidential business information (CBI)

- Screenshot of the Dryer A control panel (CBI)
- Screenshot of the Dryer B control panel (CBI)

CLOSING CONFERENCE

Concerns: Uncontrolled venting from the components on top of the fermenters and the beer well.

SIGNATURES

Report Author: A388 Date: 10/09/19
Section Chief: [Signature] Date: 10/4/19

Facility Name: Big River Resources Galva, LLC
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APPENDICES AND ATTACHMENTS

APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Albana Bega and Manojkumar Patel	2. Date(s) of Inspection: August 6, 2019
3. Company/Facility Name: Big River Resources Galva, LLC	4. Street Address, City, State: 1100 SE Second Street, Galva, Illinois
5. Number of Images: 15	6. Archival Record Location: C:\Users\ABega\OneDrive - Environmental Protection Agency (EPA)\Big River Resources Galva LLC\2019_Inspection\Photo_Videos

Image Number	File Name	Date and Time (incl. time zone and DST)	Description of Image
1	IMG_0823.JPG	2019:08:06 13:59:38	PRV top of fermenter
2	IMG_0823.JPG	2019:08:06 13:59:38	Fermenter PRV
3	IMG_0824.JPG	2019:08:06 14:36:13	Fermenter Agitator Shaft
4	IMG_0825.JPG	2019:08:06 14:36:27	Closer View of Agitator
5	IMG_0826.JPG	2019:08:06 14:37:17	Agitator
6	IMG_0827.JPG	2019:08:06 14:37:41	Fermenter Pressure Relief Valve
7	IMG_0828.JPG	2019:08:06 15:19:22	Temperature Indicator
8	IMG_0829.JPG	2019:08:06 15:19:48	Indicator
9	IMG_0830.JPG	2019:08:06 15:20:39	Process parameter rate Indicator
10	IMG_0831.JPG	2019:08:06 16:38:42	Process Area View
11	IMG_0832.JPG	2019:08:06 16:39:24	Rail Car Loading Racks
12	IMG_0833.JPG	2019:08:06 16:39:32	Common Stacks Serving Thermal Oxidizer 1 & 2 Systems
13	IMG_0834.JPG	2019:08:06 16:39:43	Tank Farm View
14	IMG_0835.JPG	2019:08:06 16:40:32	Dryer DDGS View
15	IMG_0836.JPG	2019:08:06 16:41:15	Distillation Process Area View
16	IMG_0837.JPG	2019:08:06 16:41:25	Distillation Process