

Region 6 - Enforcement & Compliance Assurance Division

Virtual Partial Compliance Evaluation Findings

Inspection Date(s):	October 27, 2020 – January 14, 2021	
Media Program:	Air	
Regulatory Program(s)	Clean Air Act Section 112(r) and 40 C.F.R. Part 68 Chemical Accident Prevention Provisions – Risk Management Program (RMP)	
Company Name:	Black Bear Midstream, LLC	
Facility Name:	North Louisiana Gas Plant	
Facility Physical Location:	1716 Friendship Rd	
(city, state, zip code)	Frierson, Louisiana 71027	
Mailing address:	9805 Katy Freeway, Suite 950	
(city, state, zip code)	Houston, Texas 77024	
County/Parish:	Desoto Parish	
Facility Phone Number	318-465-0518	Operator Phone
Facility Contact:	Dustin Daugherty	Vice President
	Dustin.Daugherty@blackbearmidstream.com	
FRS Number:	110055583480	
Media Identifier Number:	1000 0022 2877 (EPA Facility Identifier)	
NAICS:	211112 (Natural Gas Liquid Extraction)	
SIC:	N/A	
Personnel participating in inspection:		
Justin McDowell	US EPA	Inspector
Bryn Ray	LDEQ	Inspector
Keri Meyers	LDEQ	Inspector
Jamie Vicknair	LDEQ	Inspector
Glen Jenkins	LDEQ	Inspector
Dustin Daugherty	Black Bear Midstream, LLC	Vice President
EPA Lead Inspector Signature/Date		
	Justin McDowell	
Supervisor Signature/Date		
	Samuel Tates	

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

On October 27, 2020, the United States Environmental Protection Agency (EPA) Region 6 sent an email to facility personnel at the Black Bear Midstream, LLC (North Louisiana Gas Plant), located in Frierson, Louisiana, to announce the initiation of a Clean Air Act Risk Management Plan (RMP) Virtual Partial Compliance Evaluation (VPCE). The e-mail informed Black Bear personnel of the start of the VPCE which included a Microsoft Teams video opening conference scheduled on October 29, 2020. During the opening conference, Region 6 inspector Justin McDowell; and Louisiana Department of Environmental Quality (LDEQ) Chemical Accident Prevention Program inspectors Bryn Ray, Keri Meyers and Glen Jenkins met with Dustin Daugherty and Gordon Moore. I presented my credentials and informed Black Bear personnel that this was an EPA inspection to determine compliance with the federal Chemical Accident Prevention Program. The scope of the VPCE was to evaluate the facility's compliance with the Clean Air Act (CAA) Section 112(r) and the Chemical Accident Prevention Provisions in 40 C.F.R. Part 68 as well as the General Duty Clause. EPA and LDEQ inspectors discussed general VPCE procedural questions, confidential business information (CBI) procedures, interview schedules, the proposed timeline and the exit conference and final report. This VPCE is a new compliance monitoring tool that EPA Region 6 is utilizing during the COVID-19 Public Health Emergency. This evaluation included reviewing and obtaining copies of documents and records and conducting interviews and taking of statements via video conference.

FACILITY DESCRIPTION

According to the facility, "Black Bear Midstream, LLC (Black Bear) owns and operates a natural gas plant, the North Louisiana Gas Plant, in DeSoto Parish, Louisiana. The facility includes compressor engines, amine units, cryo units, oil heaters, various engine oil tanks, condensate tanks, slop oil tanks, water tanks, various chemical tanks, flare, truck loading areas, piping and valves. The incoming gas enters the plant and route through the inlet separation. The liquids from the inlet separator are sent to tanks for eventual shipment offsite via tank truck. The gas is sent to the amine units for carbon dioxide and hydrogen sulfide removal. The treated gas is then routed to the cryogenic plant to recover the natural gas liquids and sent to the pressurized bullet tanks for storage."

Section II – OBSERVATIONS

EPA Region 6 documented its observations on the Program Level 3 Checklist (**Appendix #1**). During the course of this compliance evaluation, in order to keep facility personnel safe in accordance with COVID-19 health and safety guidelines, extensions were made during the document request timeline to assure adequate time for multiple delivery and review periods.

Section III – AREAS OF CONCERN (AOC)

Closing Meeting – EPA convened a closing meeting on January 14, 2021, to discuss the Areas of Concern (AOC) noted during the VPCE, the inspection report completion process, and answer questions from Black Bear personnel.

AOC 1 – 40 C.F.R §68.15 (c) Management

“(c) When responsibility for implementing individual requirements of this part is assigned to persons other than the person identified under paragraph (b) of this section, the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.”

The management system organization chart provided October 30, 2020 listed the RMP Program Manager and several elements but omitted process hazard analysis, management of change, pre-startup safety review, employee participation, hot work and contractors.

AOC 2 – 40 C.F.R §68.65 (c)(1)(iii) Process Safety Information

“(c) Information pertaining to the technology of the process. (1) Information concerning the technology of the process shall include at least the following: (iii) Maximum intended inventory;”

Black Bear’s onsite maximum intended inventory did not match the maximum intended inventory reported in their RMP.

AOC 3 – 40 C.F.R §68.65 (d)(1)(iv) Process Safety Information

“(d) Information pertaining to the equipment in the process. (1) Information pertaining to the equipment in the process shall include: (iv) Relief system design and design basis;”

Relief system design basis (code/standard) were never provided. Relief system design first case scenario for flare study had high pressure drops and gas volume exceeding guidelines.

AOC 4 – 40 C.F.R §68.65 (d)(2) Process Safety Information

“(d) Information pertaining to the equipment in the process. (2) The owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.”

For the NGL vessels TK401, 402, 403, and 404, the U1As show a 1974 date of manufacture. Ownership and location change of a vessel requires an internal and external inspection before reuse [API 510 6.2.2.2]. Allowable service conditions and inspection interval shall be established for the new service. No records indicate that these inspections were performed and there was no documentation provided showing calculations that established the new allowable service conditions; therefore, the equipment does not comply with API 510. Inspection reports indicate vessels TK401, 402, 403, and 404 were rerated. No records indicate that rerating was performed in accordance with API 510 8.2; therefore, the equipment does not comply with API 510.

AOC 5 – 40 C.F.R §68.67 (b)(7) Process Hazard Analysis

“(b) The owner or operator shall use one or more of the following methodologies that are appropriate to determine and evaluate the hazards of the process being analyzed.”

Due to the complexity of the process, the facility did not use an appropriate PHA methodology.

AOC 6 – 40 C.F.R §68.67 (c)(4) Process Hazard Analysis

“(c) The process hazard analysis shall address: (4) Consequences of failure of engineering and administrative controls.”

Black Bear’s following PHAs: 2012 (initial for plant 1), 2013 (initial for plant 2), and 2017 (revalidation for both plant 1 and plant 2) PHAs did not evaluate consequences of failure of relieve valves (e.g. being sized improperly or not reseating); consequences of failure of instrumentation and controls (interlocks) not addressed.

AOC 7 – 40 C.F.R §68. 67 (c)(5) Process Hazard Analysis

“(c) The process hazard analysis shall address: (5) Stationary source siting;”

Black Bear’s CK Associates stationary source siting was not provided in the PHA. This document was requested during the first virtual interview.

AOC 8 – 40 C.F.R §68. 67 (c)(6) Process Hazard Analysis

“(c) The process hazard analysis shall address: (6) Human factors;”

Black Bear did not evaluate Human factors inside PHA.

AOC 9 – 40 C.F.R §68.67 (c)(7) Process Hazard Analysis

“(c) The process hazard analysis shall address: (7) A qualitative evaluation of a range of the possible safety and health effects of failure of controls.”

Risk rankings for PHA items were not found by facility personnel. There was no way to reasonably determine the qualitative evaluation of the range of the possible safety and health effects of failure of controls without the risk ranking. The facility did have the risk ranking matrix, but there is no documentation supporting applying that matrix to risk rank PHA items.

AOC 10 – 40 C.F.R §68.67 (e) Process Hazard Analysis

“(e) The owner or operator shall establish a system to promptly address the team’s findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.”

Dates for when certain recommendations were completed were not written on the 2012 PHA recommendations list for plant 1.

- A written schedule of when the actions were to be completed was not provided for the 2012 (initial for plant 1) and 2013 (initial for plant 2) PHAs.
- Dates for when certain recommendations were completed were not written on the 2012 PHA recommendations list for plant 1.

AOC 11 – 40 C.F.R §68.69 (a)(1)(iii) / §68.69 (a)(1)(iv) / §68.69 (a)(1)(v) / §68.69 (a)(1)(vi) Operating Procedures

“(a) The owner or operator shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements. (1) Steps for each operating phase: (iii) Temporary operations; (iv) Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner. (v) Emergency operations; (vi) Normal shutdown”

Amines plant SOP is missing 68.69(a)(1)(iii) through 68.69(a)(1)(vi) – temporary operations, emergency shutdown, emergency operations, normal shutdown, startup following turnaround or after emergency shutdown. Appendix C, that Dustin stated, has the other operational parameters only fulfills 68.69(a)(2)(i) and 68.69(a)(2)(ii) – consequences of deviation and steps to correct or avoid those.

AOC 12 – 40 C.F.R §68.69 (c) Operating Procedures

“(c) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate.”

Black Bear did not certify annually that these operating procedures are current and accurate. The Cryo Plant SOP is not current and accurate because it references TAHH-416 on page 107 of the SOP and in the cause and effect matrix under the notes section (pg. 1 of 4 of cause and effect matrix). Dustin stated that TAHH-416 is the incorrect identifier for this interlock, and the correct identifier is TAHH-413C. The SOP isn’t updated to include the correct identifier for this process instrumentation.

AOC 13 – 40 C.F.R §68.71 (a)(1) Training

“(a) *Initial training.* (1) Each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in the operating procedures as specified in §68.69. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks.”

Black Bear Midstream failed to document initial training.

AOC 14 – 40 C.F.R §68.71 (b) Training

“(b) *Refresher training.* Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The owner or operator, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.”

Black Bear Midstream failed to consult with employees involved in operating the process, to determine the appropriate frequency of refresher training.

AOC 15 – 40 C.F.R §68.73 (b) Mechanical Integrity

“(b) *Written procedures.* The owner or operator shall establish and implement written procedures to maintain the on-going integrity of process equipment.”

Black Bear failed to provide the MI program manual full text. Dustin provided the PSM program manual, which requires this requested MI program manual to be written. Written procedures could not be found for maintaining the following process equipment selected for review –

- o TAHH-413C
 - o E-221 (plate heat exchanger)
 - o EX-121 (expander)
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AOC 16 – 40 C.F.R §68.73 (d)(1) / §68.73 (d)(2) / §68.73 (d)(4) Mechanical Integrity

“(d) *Inspection and testing.* (1) Inspections and tests shall be performed on process equipment. (2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. (4) The owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.”

- No inspection and test records were provided for E-221 (plate heat exchanger); therefore, there is no documentation showing that inspections and tests were performed on this piece of process equipment. 68.73(d)(1).
- No inspection and test records were provided for EX-121 (expander); therefore, there is no documentation showing that inspections and tests were performed on this piece of process equipment. 68.73(d)(1).
- The 2012 Acuren inspections for NGL tanks TK 401, 402, 403, and 404 did not indicate if the inspections were performed in accordance with API 510. The reports also did not include corrosion rates and the calculations for retirement thickness/remaining life of vessel, which is part of the thickness inspection per API 510 9th edition 5.5.5.1. 68.73(d)(2).
 - o Note: It is also required, per the sites PSM procedure, that inspections and tests follow RAGAGEP.

- The name of the person who performed the function test on was not documented on the 5/30/2017 ESD test report. 68.73(d)(4).

AOC 17 – 40 C.F.R §68.73 (e) Mechanical Integrity

“(e) *Equipment deficiencies.* The owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in §68.65) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.”

- For the NGL vessels TK401, 402, 403, and 404, the U1As show a 1974 date of manufacture. Ownership and location change of a vessel requires an internal and external inspection before reuse [API 510 6.2.2.2]. Allowable service conditions and inspection interval shall be established for the new service. No records were provided to confirm that these inspections had been performed and that the NGL vessels were suitable for the process application for which they will be used. This is defined by the code and standard API 510, and by not performing these inspections, the facility is failing to correct the deficiency in the equipment that is outside acceptable limits defined by the applicable code/standard.
- Inspection reports indicate vessels TK401, 402, 403, and 404 were rerated. API 510 8.2 defines what needs to be performed by the owner/operator in order to rerate vessels, including calculations performed in accordance with the applicable code, new design conditions, and evidence of stamping. None of these documents showing calculations, new design conditions, and evidence of stamping were provided by the facility for these four rerated vessels. This is defined by the code and standard API 510, and by not rerating the vessel in accordance with API 510 8.2, the facility is failing to correct the deficiency in the equipment that is outside acceptable limits as defined by the applicable code/standard.

AOC 18 – 40 C.F.R §68.75 (b)(1), (b)(2), (b)(3), (b)(4), (b)(5) Management of Change

“(b) The procedures shall assure that the following considerations are addressed prior to any change: (1) The technical basis for the proposed change; (2) Impact of change on safety and health; (3) Modifications to operating procedures; (4) Necessary time period for the change; and, (5) Authorization requirements for the proposed change.”

MOC procedures are required to contain the information in 68.75(b)(1) through (b)(5). For MOC 44, authorization requirements aren't defined and therefore, there is no way to determine that the correct authorizer(s) signed off on this MOC.

AOC 19 – 40 C.F.R §68.79 (a) Compliance Audits

“(a) The owner or operator shall certify that they have evaluated compliance with the provisions of this subpart at least every three years to verify that procedures and practices developed under this subpart are adequate and are being followed.”

None of the compliance audits conducted by Black Bear were certified. A sign-in sheet does not constitute a certification for compliance audits. No dates of completion for the #16 (PHA); #24 (MI); #28 (siting study) recommendations.

AOC 20 – 40 C.F.R §68. 83 (a), (b), (c) Employee Participation

“(a) The owner or operator shall develop a written plan of action regarding the implementation of the employee participation required by this section. (b) The owner or operator shall consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in this rule. (c) The owner or operator shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this rule.”

The employee participation provided did not demonstrate how employees are involved in the RMP program elements such as process hazard analyses.

AOC 21 – 40 C.F.R §68.87 (b)(2) Contractors

“(b) *Owner or operator responsibilities.* (2) The owner or operator shall inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.”

Black Bear failed to provide documentation of how contractors are informed of potential fire, explosion, or toxic release hazards related to the contractor's work and the process. An orientation was discussed but the only documented provided was a sign-in and sign-out log.

AOC 22 – 40 C.F.R §68.87 (b)(3) Contractors

“(b) *Owner or operator responsibilities.* (3) The owner or operator shall explain to the contract owner or operator the applicable provisions of subpart E of this part.”

Black Bear failed to inform contract owners or operator of the emergency response plan. An orientation was discussed but no documentation was provided.

AOC 23 – 40 C.F.R §68.87 (b)(5) Contractors

“(b) *Owner or operator responsibilities.* (5) The owner or operator shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in paragraph (c) of this section.”

Black Bear did not provide documentation of how they periodically evaluate the performance of the contract owner or operator in fulfilling their obligations.

AOC 24 – 40 C.F.R §68.93 (c) Emergency Response

“(c) The owner or operator shall document coordination with local authorities, including: The names of individuals involved and their contact information (phone number, email address, and organizational affiliations); dates of coordination activities; and nature of coordination activities.”

Black Bear conducted their coordination activities for 68.93 over the phone on April 3, 2020. Due to Covid-19 restrictions, they did not coordinate in person. Black Bear failed to document the nature of coordination activities, which is required by 68.93(c).
