



ENTERPRISE PRODUCTS PARTNERS L.P.  
ENTERPRISE PRODUCTS GP, LLC  
(General Partner)

ENTERPRISE PRODUCTS OPERATING, LLC

August 27, 2014

Pipeline and Hazardous Materials Safety Administration  
U.S. Department of Transportation  
8701 South Gessner, Suite 1110  
Houston, TX 77074

Attn: Mr. R. M. Seeley  
Director, Southwest Region, PHMSA  
Via FedEx  
Via e-mail

Re: CPF No. 4-2014-5017  
Notice of Probable Violation and Proposed Compliance Order  
Enterprise Products Operating LLC ("Enterprise")

Dear Mr. Seeley,

On July 24, 2014, the Pipeline and Hazardous Materials Safety Administration (PHMSA or the Agency) issued a Notice of Probable Violation (NOPV) and Proposed Compliance Order (PCO) to Enterprise Products Operating, LLC (Enterprise or the Company). This letter is the Company's formal response to that NOPV and PCO. Pursuant to 49 C.F.R. Part 190.208, this response is timely. For reasons set forth more fully below, Enterprise believes that the issues presented by the NOPV and PCO in this matter can be best addressed through execution of a Consent Order by the parties, as allowed by 49 C.F.R. Part 190.208(b)(2), and Part 190.219.

The incident at issue in this NOPV is a flash fire that occurred at the Company's Beaumont terminal facility in April 2014. As noted in the NOPV, the Company has experienced several similar incidents at other facilities in our system over the past five years. At the request of Enterprise, Company officials met with PHMSA in July of 2013 and again in February 2014 to discuss these types of incidents, and to provide the Agency with updates on the Company's efforts to minimize their occurrence. The Company fully understands the significance of these events, and it is our goal to ensure that such events are prevented to the fullest extent possible. For that reason, instead of simply implementing the Compliance Order proposed with this NOPV, Enterprise would like to work with the Agency to take a more holistic approach to review of the underlying issues, and, as appropriate, identify additional actions that could help minimize recurrence of these types of events.

The Company has been focused on these issues for some time, and we believe changes in procedure and practice that have already been completed will show improvement in prevention of these kinds of accidents. We have some additional ideas on how to strengthen our programs in this regard, and we believe these could be best addressed in a Consent Order that would apply more broadly to our system.

This response briefly reviews some the actions we have already taken to address the occurrence of flash fire incidents, and then identifies areas where we propose to devote further attention. After you have an opportunity to review this response, we suggest a meeting to discuss how a Consent Order could be most useful in this instance.

### **Background**

Enterprise operates one of the largest pipeline systems in the United States, spanning several states. While PHMSA's most recent data (2013) shows that the Company operated over 11.6% of the hazardous liquid pipelines in the country, the Agency's data for the same year showed that Enterprise was responsible for only 4.7% of reportable incidents on its system. We believe that statistic reflects the emphasis we place on safety. For the five year period from 2009 to 2014, however, we also show an unusually high percentage of "serious" incidents, including those caused by the type of work addressed in the current NOPV/PCO.

PHMSA and the industry have worked cooperatively to reduce the number of serious pipeline incidents nationally, and those efforts are reflected by the fact that only 13 serious incidents on hazardous liquid pipelines occurred nationally between 2009 and 2014 to date. Unfortunately, Enterprise was responsible for 2 of those.<sup>1</sup> Although the data set is fortunately small in this instance, our Company intends to minimize the occurrence of such incidents from its system to the fullest extent possible. As set forth below, we have already begun to address these issues, and through this letter we propose to continue that work through entry of a Consent Order.

### **Overview of Company Actions**

#### **1. Safety Programs and Safety Record**

Enterprise has taken a multifaceted approach to safety over the last five years. This approach involves leadership commitment, the application of policies and procedures, training, and the utilization of performance measures that incorporate leading and lagging indicators.

*Leadership Commitment:* Enterprise began a cultural assessment process in 2010 to gain an understanding of possible barriers to safety improvement. Enterprise then initiated the "Cardinal Rules of Safety" to provide a focus on those policies and procedures that are critical to our safety success. The Cardinal Rules were launched through a series of Safety Leadership Summits beginning in 2011. The summits were held in all operating areas and were conducted by senior and executive management and attended by all supervisory and management personnel. The focus of the summits was to emphasize and train supervisory and management personnel in safety leadership. The summits provided some historic incidents and issues and emphasized the leadership commitment towards safety. The summits also provided an overview of policies, procedures and expectations. The summits were followed up with a second round of meetings in 2013. The second round of meetings included all field operations and maintenance personnel.

---

<sup>1</sup> In addition, 2 serious incidents occurred in 2009 and 2010 on assets which were previously operated as part of the Texas Eastern Pipeline Products Company (TEPPCO). Enterprise acquired these assets just after the 2009 serious incident occurred. Further, 1 serious incident occurred in 2013 on a pipeline operated by an affiliate of Enterprise, Enterprise Crude Pipeline.

Enterprise also maintains processes to provide constant safety communication with executive management, including weekly meetings with executives and monthly meetings with operations and support leadership. These meetings focus on prior incidents and causes, emerging issues, and initiatives. In 2013, Enterprise also launched the “Construction Rules of Safety” to more effectively communicate expectations and commitments to contractors.

*Policies and Procedures:* Enterprise maintains several safety procedures to assist in safely conducting hot work. As experience, incidents, and organizational changes have occurred, Enterprise has made adjustments to these policies and procedures to assist in properly driving safety improvement. These policies and procedures include Job Planning, Work Permitting, Contract Operations Representatives (COR), Energy Isolation, Equipment Preparation, Safe Work Practices, Contractor Orientation, and the Contractor Safety Manual.

*Training:* Enterprise maintains training processes to provide for the appropriate knowledge and application of safety policies and procedures. These processes include new hire orientations, operator/technician training and qualification, contractor orientation, and supervisory training. The operator/technician training includes initial upon assignment, comprehensive asset and policy and procedure training, and field verification. Various safety related topics are presented throughout the year including policy and procedural changes, safety bulletins, and various compliance activities. The new employee orientation was recently expanded to five days in part to allow for greater coverage of higher risk policies and procedures.

*Organizational Changes:* The Company’s Safety Group has recently been reorganized to allow a greater focus on field activities. These changes include the addition of management and field support. This allows the field safety group to focus on job planning and assist in monitoring execution. The field group also reviews performance indicators and various safety issues with field personnel. A new contractor safety group was also created to assist in evaluating contractor performance and planning.

*Performance Measures:* Enterprise uses multiple indicators to measure safety related performance. These measures include the traditional safety metrics including Employee Total Recordable Incident Rate (TRIR), Employee Lost Time Incident Rate (LTIR), and contractor recordable incidents. In addition, Enterprise recently started a new process to focus on learnings from higher risk incidents and near misses. These metrics focus on Work Practices associated with areas such as Planning & Permitting (including hot work), Energy Isolation, and Hazard Assessment. These Work Practice indicators cover the performance of both Enterprise and contractors. Enterprise also monitors action item closure associated with incident investigations and audit findings. These performance indicators are reviewed from the executive level through the support and field organizations, and are used to adjust our safety processes.

Results of these recent efforts are encouraging. The second quarter of 2014, as compared to the second quarter of 2013, showing the following improvements:

- *Employee TRIR:* (0.54) 36% Decrease
- *Employee LTIR:* (0.05) 76% Decrease
- *Contractor incidents:* (18) 23% Decrease
- *Work Practice incident rate (Overall – Including Construction Heavy Equipment Related Activities):* (2.96) 32% Decrease
- *Work Practice Rate (Planning & Permitting, Hazard Assessment, Energy Isolation – Processes associated with hot work):* (0.89) 53% Decrease

## 2. Review of 'Hot Work' Incidents Over Past 5 Years

As indicated in the NOPV, at the time of the Beaumont incident, Enterprise had experienced 5 hot work related incidents that resulted in an injury since 2009.<sup>2</sup> Incident investigations associated with these incidents were conducted and revealed the following causal factors: improper vapor testing at the source of the work, improper job planning or permitting procedures, improper equipment preparation, and isolation point failures. Additionally, corrective actions were initiated, including but not limited to policy and procedural changes along with targeted training on the changes, and awareness efforts.

## 3. Review and Revision of Relevant Safety Policies and Procedures Over Past 5 Years

Over the past 5 years, Enterprise has made several changes to Safety Policies and Procedures associated with hot work, as referenced in Item 1 above. Enterprise has also invested in new portable gas testing equipment in which calibration and use can be tracked.

More specifically, Enterprise has made changes to the job plan procedures in an effort to assure higher risk work is properly planned. Enterprise has changed the permit and energy isolation processes to better identify roles and responsibilities, including gas testing. Equipment preparation procedures have been changed to account for the different types of assets and specify activities such as the use and limitations of purge and clearing processes. Changes have been made to contractor requirements to assure policies and procedures are covered. Safe work practices have been revised to include precautions associated with blinds and flange breaks. The Contract Operations Representative (COR) requirements have been changed to limit the type of work a COR can oversee and assure a COR meets minimum requirements.

---

<sup>2</sup> This includes the 2 serious incidents that occurred in 2009 and 2010 on TEPPCO assets and 1 serious incident that occurred in 2013 on the Enterprise Crude Pipeline, an affiliate of Enterprise (discussed in footnote 1).

#### 4. Revisions to Preparation of Equipment Prior to Hot Work

In an effort to improve our hazard recognition and controls, Enterprise is developing a comprehensive revision of equipment preparation procedures to provide a better understanding of preparation procedures, safe guards and limitations. The revision will also cover how equipment preparation translates to specific job planning and procedures.

#### 5. Review of Block Work Permit Process

The block work permitting process is designed to provide for a hazard assessment, establish clear lines of communications and assure all involved understand the work to be performed. The process provides guidance regarding the hazard assessment, the controls to be utilized and any monitoring to be performed. The process provides guidance specifically for hot work, including the testing of valves, piping, flanges, equipment, and other possible fuel sources within 35 ft.

Improvements to the process are being proposed to better evaluate and isolate tasks associated with hot work and line breaks. This proposal is an attempt to assure the hazard controls for these types of tasks are independently evaluated and assessed. The proposal is also designed to limit other work in the area while these tasks are occurring.

#### 6. Training: Materials, Methods and Frequency

As described briefly in Item 1 above, Enterprise provides various training including new employee orientation, operations and maintenance training and specific safety topic training. All of these processes provide information around safety policies and procedures and how they are applied to various assets. Enterprise also provides training and information around incidents through indicator reviews, safety bulletins and other training methods.

Additionally, Enterprise is currently developing a safety emphasis process. The process includes an overall corporate commitment statement for all employees focusing on core values and a specific reference to Cardinal Rules. The process also encompasses communication to support groups regarding job planning and other critical procedures. The field organizations will be trained in the new equipment preparation requirements with a refresher on Cardinal Rules. To sustain the emphasis on critical procedures the field organizations will be trained annually in Cardinal Rules, Equipment Preparation, Permitting (Hot Work), Energy Isolation, and Job Planning. The critical procedures will also be covered in supervisory training with a leadership emphasis.

#### 7. Use of Third Party Consultant

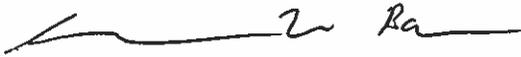
The PCO as issued with the NOPV for the April 2014 incident in Beaumont requested that Enterprise propose a third party consultant acceptable to the Agency, to assist the Company in conducting a review of hot work incidents over the past years and prepare proposed corrective measures. As you can see by the content of this response letter, we believe we have already reviewed all such incidents, identified corrective measures and begun implementation which is showing measurable signs of success.

Subject to your approval, we will select a third party consulting firm to review our efforts to date on this issue, and then assist us in preparing a report for the Region to fulfill our obligation either under the PCO or a Consent Order.

**Summary**

As the Agency knows from prior meetings, and as summarized in this letter, Enterprise has already initiated a review of the issues presented in this NOPV and PCO. The Company believes that a Consent Order would be the most effective and efficient way to continue those efforts in a comprehensive manner, toward improving the level of safety both Enterprise and PHMSA expect to see. We would like to schedule a meeting with the Region at your convenience, to discuss these issues further.

Sincerely,

A handwritten signature in black ink, appearing to read "Graham Bacon". The signature is fluid and cursive, with a long horizontal stroke at the end.

Graham Bacon  
Group Sr. Vice President, Operations & EHS&T