

February 24, 2025

BY E-MAIL

Puget Sound Clean Air Agency
Attn: Alasdair Graham, Inspector
1904 3rd Avenue, Suite 104
Seattle, WA 98101-3317
Inspection@psccleanair.gov; AlasdairG@psccleanair.gov

**Re: Tacoma LNG (Registration No. 30022)
GNOV Nos. 3-A001512, 3-A001513, 3-A001514, 3-A001515, and 3-A001516**

Dear Mr. Graham,

Puget Sound Energy, Inc. (PSE) received the above-named General Notices of Violation (GNOVs) from the Puget Sound Clean Air Agency (PSCAA) relating to the Tacoma Liquefied Natural Gas facility (Tacoma LNG). This letter responds to the Corrective Action Order in each GNOV requesting that PSE identify the actions taken to correct the violation and achieve compliance with PSCAA's regulations. The allegations in each of the NOVs pertain to self-reported events occurring in 2024. As documented in detail below, the corrective actions taken in response to these events have been effective in resolving their underlying causes and the facility has eliminated diversion events since mid-2024.

This response addresses each of the incidents identified in the following GNOVs, including the corrective actions that PSE has undertaken and what PSE has done to prevent recurrence:

- 3-A001512
- 3-A001513
- 3-A001514
- 3-A001515
- 3-A001516

Tacoma LNG operates a flare to control process emissions from our liquefaction and loading operations. These GNOVs pertain to incidents in February 2024 when the flare experienced a loss of flame on its gas burners. Standard safety protocol before relighting a gas burner is to clear the combustion area of potentially combustible gases that might have built-up post-flame loss. This standard protocol is equally applicable to the Tacoma LNG flare burners. If the burners on the cold or warm side of the flare are extinguished, then the combustion zone must be evacuated

and those gases routed to the bypass stack. The unit's safety procedures ensure the number one priority is protecting the safety of personnel followed by equipment. Once the burner is relit, the bypass valve can be closed by the system.

In accordance with the original equipment manufacturer (OEM) specifications, bypass stack venting of volatile organic compounds (VOCs) prior to relighting an extinguished flame cannot be eliminated without compromising facility and personnel safety. However, in an effort to limit the recurrence of any such event, the Tacoma LNG team has worked diligently to identify and address the root causes of the incidents identified in the GNOVs and take appropriate action to reduce the likelihood of recurrence. The corrections that PSE has undertaken in response to the GNOV incidents are summarized below.

GNOV 3-A001512

GNOV 3-A001512 addresses a situation that occurred on February 1, 2024, while the facility was in liquefaction. Over-response from the combustion control logic caused oscillations in the combustion air supply which led to a loss of all flames in the flare. In response to the loss of flame, the system controls automatically blocked certain flows and, as a consequence, retained some of the liquefaction waste gas sources in the system. This action reduced the quantity of liquefaction waste gases reaching the diversion vent, thereby minimizing the amount of gas that would need to be vented to protect the safety of personnel and equipment.

As a result of this event, some cold and warm stream waste gases were safely directed to their associated diversion vents during the required flare cool down and purge. After 18 minutes, the pilots were relit, the flare was returned to service, and the temporarily stored liquefaction waste gas was routed to the flare for destruction. During this incident, approximately 38.2 pounds of VOCs were vented to the bypass stack.¹

The flare has primary and secondary controls for managing combustion air supply to the warm high burner. When the combustion temperature in the flare deviates more than a certain amount from the primary control set point, the secondary control will take over. In this instance, the transition from the primary control to the secondary control caused a large step change in the combustion air flow, resulting in the loss of flame. When investigating the root cause of this event, the facility determined that the secondary control's programming was not dynamic like the primary control.

To give the primary control more operating range, the deviation trigger was increased to reduce the likelihood that the secondary control would take over. The facility also contacted the OEM on the day of the event and discussed the need to make the secondary control programming dynamic, to be consistent with the primary control programming. Staff worked with the OEM to implement this change over a period of several months, and ultimately completed the transition

¹ The amount of diverted VOC emissions was 16% of the Notice of Construction (NOC) No. 11386A Condition 15.b flare VOC limit of 244 pounds per day.

in May 2024. Since these modifications have been implemented there has not been a loss of flame associated with control mode changes.

GNOV 3-A001513

GNOV 3-A001513 addresses a situation that occurred on February 6, 2024. While the facility was in liquefaction, over-response by the stack louver's control logic caused the stack louvers to open excessively, which led to a loss of flame on the warm stream side. Per standard safety protocols upon loss of flame, the waste gas going to the warm combustion stream was diverted to the bypass stack for approximately 1.5 minutes while the operator restarted the flare. During this incident, approximately 0.1 pounds of VOCs were vented to the bypass stack.²

The same day of the incident, the facility contacted the OEM to discuss the need to reduce the sensitivity of the stack louver controller. The change was made that day. Loss of flame due to over-response by the stack louver control has not reoccurred since reducing the sensitivity of the stack louver controller.

GNOV 3-A001514

GNOV 3-A001514 addresses a situation that occurred on February 15, 2024, when the facility was transitioning to liquefaction. The waste gas that served as the fuel gas supply source at the time had an inconsistent heat content, which caused the heating value, and thus combustion air flow, to fluctuate and lead to a loss of flame on the warm stream side and damage to the warm high burner. Per standard safety protocols upon loss of flame, the waste gas going into the warm combustion area was diverted to the bypass stack for approximately 1.5 minutes while the operator relit the warm low burner. Liquefaction was shut down pending inspection and repair.

The variable heat content in the waste gas was determined to be the root cause of the flame loss, and the facility changed its procedures to use only inlet gas or boil-off gas (BOG) as fuel gas during startup. These gases have a more consistent heat content, which allows for a more controlled transition into high fire, reducing the risk of flame loss on the burner. During this incident, approximately 0.2 pounds of VOCs were vented to the bypass stack.³ Loss of flame during startup has not reoccurred as a result of fuel heat input variability since changing the fuel gas supply source.

GNOV 3-A001515

GNOV 3-A001515 addresses a situation that occurred on February 16, 2024, while the facility was transitioning to liquefaction after the shutdown the prior day (see above). Unknown to the facility at the time, the warm high combustion air blower damper had been damaged during the loss of

² The amount of diverted VOC emissions was 0.04% of the NOC No. 11386A Condition 15.b flare VOC limit of 244 pounds per day.

³ The amount of diverted VOC emissions was 0.08% of the NOC No. 11386A Condition 15.b flare VOC limit of 244 pounds per day.

flame event the prior day. This damage occurred in an area that is not readily accessible and thus could not be visually identified prior to the relighting of the flare. The damaged air damper caused excess air flow during the transition to liquefaction, which resulted in a loss of all flames in the flare. In response to the loss of flame, the system controls automatically blocked certain flows and, as a consequence, retained some of the liquefaction waste gas sources in the system. This action reduced the quantity of liquefaction waste gases reaching the diversion vent, thereby minimizing the amount of gas that would need to be vented to protect the safety of personnel and equipment. The facility was shut down. Consequently, cold and warm stream waste gases (e.g., compressor seals) were safely directed to their associated diversion vents. After 17.5 minutes the pilots were relit, the flare returned to service and the temporarily stored liquefaction waste gas routed to the flare for destruction.

A review of the flow data from the flare revealed a likely problem with the damper; an internal inspection identified damage to the damper. The facility and flare remained shut down until the damper was replaced. During this incident, approximately 0.7 pounds of VOCs were vented to the bypass stack.⁴ Loss of flame as a result of damper damage has not reoccurred since the damper replacement.

GNOV 3-A001516

GNOV 3-A001516 addresses a situation that occurred on February 29, 2024, while the facility was transitioning to liquefaction. The like-kind replacement air damper that was installed in response to the February 16 event (see above) behaved differently than the original damper, resulting in abnormal combustion air flow fluctuations and a loss of flame on the warm stream side. Per standard safety protocols upon loss of flame, the waste gas going to the warm combustion area was diverted to the bypass stack for approximately 1.5 minutes while the operator restarted the flare. The facility worked with the OEM to adjust the control parameters for the flow characteristics of the replacement air damper and further tune the damper operation. The facility stayed in shut down mode until this tuning was completed. During this incident, approximately 0.1 pounds of VOCs were vented to the bypass stack.⁵ Loss of flame resulting from the oversensitivity of the air damper has not reoccurred since this tuning was completed.

Conclusion

We appreciate this opportunity to have a dialog with you regarding the above events and GNOVs. PSE takes these events very seriously and took immediate steps to minimize any uncontrolled emissions. In all diversion instances, the flare controls implemented real time safety protocols to protect personnel and the facility. Corrective actions were timely implemented, including making process changes that reduce the risk of future upsets and revising the flare control settings to further reduce the likelihood of future diversion events. At no time did these bypasses—or the

⁴ The amount of diverted VOC emissions was 0.29% of the NOC No. 11386A Condition 15.b flare VOC limit of 244 pounds per day.

⁵ The amount of diverted VOC emissions was 0.04% of the NOC No. 11386A Condition 15.b flare VOC limit of 244 pounds per day.

emissions associated with them— threaten Tacoma LNG’s compliance with its permit limits or cause or contribute to air pollution in such a quantity as to create a threat to the public health or welfare.

If you have any questions after reviewing this letter, I can be reached at (425) 213-6638 or at Dustin.Cornidez-Pittman@pse.com.

Sincerely,

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

Dustin Cornidez-Pittman
Manager Environmental Services
Puget Sound Energy

CC: Lorna Luebbe
Sara Leverette
Ruth Juris
Mark Carlson
Thor Angle
Allison Watkins Mallick



PUGET SOUND

Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001512

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001512
Violation Date: 2/1/2024	Time:	Certified Mail #: 9214 8901 9403 8300 2952 52
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:


NC Order of Approval 11386A Cond. 10 The following processes shall have their vapor waste gases routed to the enclosed ground flare before being released to the atmosphere: a. Feed Gas Compressor, b. Amine Pretreatment Unit, c. Heavies Storage and fuel system, d. Liquefaction, e. Post Load Purge

Alleged Reason(s) for Violation:


On February 1st, 2024, while the facility was in liquefaction, over-response from the combustion control logic caused oscillations in the combustion air supply which led to a loss of all flames in the VDU. This loss of flame resulted in cold and warm stream waste gases being directed to their associated diversion vents.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By: 
 Ally Graham, Inspector, 206-689-4064
 AlasdairG@pscleanair.gov

Date: 2/10/2025

Received By: 
 Signature
 (Signing is not an admission of guilt)

Dustin Cornidez-Pittman 2/19/25
 Print Name Date



PUGET SOUND

Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001513

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001513
Violation Date: 2/6/2024	Time:	Certified Mail #: 9214 8901 9403 8300 2979 35
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:

NC Order of Approval 11386A Cond. 10 The following processes shall have their vapor waste gases routed to the enclosed ground flare before being released to the atmosphere: a. Feed Gas Compressor, b. Amine Pretreatment Unit, c. Heavies Storage and fuel system, d. Liquefaction, e. Post Load Purge

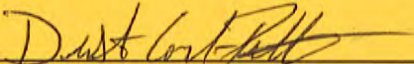
Alleged Reason(s) for Violation:

On February 6th, 2024, while the facility was in liquefaction, over-response by the stack louver's control logic caused the stack louvers to open excessively, which led to a loss of flame on the warm stream side. Consequently, warm stream waste gas were directed to the diversion vent for 1.5 minutes.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By:  Date: 2/10/2025
 Ally Graham, Inspector, 206-689-4064
 AlasdairG@psc Clean Air.gov

Received By:  Dustin Cornidez-Pittman 2/19/25
 Signature Print Name Date
 (Signing is not an admission of guilt)



PUGET SOUND

Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001514

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001514
Violation Date: 2/15/2024	Time:	Certified Mail #: 9214 8901 9403 8300 2998 47
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:

NC Order of Approval 11386A Cond. 10 The following processes shall have their vapor waste gases routed to the enclosed ground flare before being released to the atmosphere: a. Feed Gas Compressor, b. Amine Pretreatment Unit, c. Heavies Storage and fuel system, d. Liquefaction, e. Post Load Purge

Alleged Reason(s) for Violation:

On February 15th, 2024, while the facility was transitioning to liquefaction, combustion air flow fluctuations resulted in a loss of flame on the warm stream side. Consequently, warm stream waste gas were directed to the diversion vent for 1.5 minutes.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By: _____

Date: _____

2/10/2025

Ally Graham, Inspector, 206-689-4064

AlasdairG@psc Clean Air.gov

Received By: _____

Dustin Cornidez-Pittman

2/19/25

Signature

Print Name

Date

(Signing is not an admission of guilt)



PUGET SOUND

Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001515

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001515
Violation Date: 2/16/2024	Time:	Certified Mail #: 9214 8901 9403 8300 3028 82
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:

NC Order of Approval 11386A Cond. 10 The following processes shall have their vapor waste gases routed to the enclosed ground flare before being released to the atmosphere: a. Feed Gas Compressor, b. Amine Pretreatment Unit, c. Heavies Storage and fuel system, d. Liquefaction, e. Post Load Purge

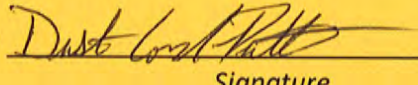
Alleged Reason(s) for Violation:

On February 16th, 2024, while the facility was transitioning to liquefaction, combustion air flow fluctuations exacerbated by a damaged damper resulted in a loss of all flames in the VDU. Consequently, cold and warm stream waste gases (e.g., compressor seals) were directed to their associated diversion vents.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By:  Date: 2/10/2025
 Ally Graham, Inspector, 206-689-4064
 AlasdairG@psc Clean Air.gov

Received By:  Dustin Cornidez-Pittman 2/19/25
 Signature Print Name Date
 (Signing is not an admission of guilt)



PUGET SOUND

Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001516

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001516
Violation Date: 2/29/2024	Time:	Certified Mail #: 9214 8901 9403 8300 3049 16
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:

NC Order of Approval 11386A Cond. 10 The following processes shall have their vapor waste gases routed to the enclosed ground flare before being released to the atmosphere: a. Feed Gas Compressor, b. Amine Pretreatment Unit, c. Heavies Storage and fuel system, d. Liquefaction, e. Post Load Purge


Alleged Reason(s) for Violation:

On February 29th, 2024, while the facility was transitioning to liquefaction, warm stream high burner air fuel mixing chamber issues attributed to combustion air flow fluctuations which, in turn, resulted in a loss of flame on the warm stream side. Consequently, warm stream waste gas were directed to the diversion vent for 1.5 minutes.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By:  Date: 2/10/2025
 Ally Graham, Inspector, 206-689-4064
 AlasdairG@psc Clean Air.gov

Received By:  Dustin Cornidez-Pittman 2/19/25
 Signature Print Name Date
 (Signing is not an admission of guilt)

April 8, 2025

BY E-MAIL

Puget Sound Clean Air Agency
Attn: Alasdair Graham, Inspector
1904 3rd Avenue, Suite 104
Seattle, WA 98101-3317
Inspection@psccleanair.gov; AlasdairG@psccleanair.gov

**Re: Tacoma LNG (Registration No. 30022)
GNOV Nos. 3-A001583, 3-A001584, 3-A001586**

Dear Mr. Graham,

Puget Sound Energy, Inc. (PSE) received the above-named General Notices of Violation (GNOVs) from the Puget Sound Clean Air Agency (PSCAA) relating to the Tacoma Liquefied Natural Gas (Tacoma LNG) facility. This letter responds to the Corrective Action Order in each GNOV requesting that PSE identify the actions taken to correct the violation and achieve compliance with PSCAA's regulations. The allegations in each of the NOVs pertain to self-reported events.

This response addresses each of the incidents identified in the following GNOVs, including the corrective actions that PSE has undertaken and what PSE has done to prevent recurrence:

- 3-A001583
- 3-A001584
- 3-A001586

Tacoma LNG operates a flare to control process emissions from our liquefaction and loading operations. These GNOVs pertain to three flare diversion events in 2023 and 2024. Standard safety protocol before relighting a gas burner is to clear the combustion area of potentially combustible gases that might have built-up post-flame loss. This standard protocol is equally applicable to the Tacoma LNG flare burners. If the burners on the cold or warm side of the flare are extinguished, then the combustion zone must be evacuated and those gases routed to the bypass stack. The unit's safety procedures ensure the number one priority is protecting the safety of personnel followed by equipment. Once the burner is relit, the bypass valve can be closed by the system.

In accordance with the original equipment manufacturer (OEM) specifications, bypass stack

venting of volatile organic compounds (VOCs) prior to relighting an extinguished flame cannot be eliminated without compromising personnel and facility safety. However, in an effort to limit the recurrence of any such event, the Tacoma LNG team has worked diligently to identify and address the root causes of the incidents identified in the GNOVs and take appropriate action to reduce the likelihood of recurrence. As of the date of this letter, corrections have been made as summarized below.

GNOV 3-A001583

GNOV 3-A001583 addresses a situation that occurred on April 21, 2024. While the facility was in liquefaction, a malfunction in the liquid hydrocarbon collection drum level controller caused a rapid increase in heat input to the warm burner. The level controller opened suddenly and by an excessive amount, resulting in a rapid increase of heat to the burner, instability in the fuel and air mixture, and a pressure surge, which led to flame outs of all vapor destruction unit (VDU) burners. As a result of this event, some cold and warm stream waste gases were safely directed to their associated diversion vents during the required flare cool down and purge. Once it was safe to relight the pilots, the flare was returned to service. Liquefaction was shut down pending inspection, testing, and calibration of the level controller and associated instrumentation. During this incident, approximately 2.6 pounds of VOCs were vented to the bypass stack.¹

The drum level controller was inspected and modified, adding limitations on the controller to slow its allowable rate of change thus preventing the possibility that the level controller could open suddenly and excessively. The facility also added more parameters from this level controller to the data historian, to capture more detailed information about its operation in the event of any future issues and tuned the downstream system to better manage process upsets in the future. This tuning includes changing procedures to operate one of the two back pressure controllers in manual mode, so that any pressure and flow changes can be moderated. Since this event and the corrective actions, there has not been a diversion event caused by mis-operation of this level controller.

GNOV 3-A001584

GNOV 3-A001584 addresses a situation that occurred on January 12, 2024, while the facility was shut down for maintenance and no processing activities were occurring. An unexpected high-pressure condition occurred due to the build-up of unprocessed pipeline natural gas within the system resulting from the inadvertent repositioning of valves after the completion of maintenance activities. A portion of the unprocessed pipeline natural gas (i.e., not waste gas) was routed through the diversion vent rather than the pressure relief valve (PRV) to protect the

¹ The amount of diverted VOC emissions was 1.07% of the Notice of Construction (NOC) No. 11386A Condition 15.b flare VOC limit of 244 pounds per day.

safety of personnel and equipment. During this incident, approximately 0.5 pounds of VOCs were vented to the bypass stack.²

The facility conducted extensive retraining for the field operator involved in the repositioning of the valves. The field operator was relieved of his responsibilities, required to complete a rigorous three-month training program, and then required to requalify for his position. The facility also conducted refresher training on valve lockout/tag out procedures for all operators. Since these trainings were completed, the issue has not reoccurred.

GNOV 3-A001586

GNOV 3-A001586 addresses a situation that occurred on September 22, 2023. As the rate of heat input to the burner changed during the start of liquefaction, the burner controller transitioned from the primary to the secondary flow controller. This caused a large change in the air flow, resulting in a high plenum temperature in the combustion air mixing chamber below the flame diffuser. As a result of the high temperature, the large warm burner tripped. The gas flow was then redirected to the small warm burner, but the flow caused the pilot to be blown out. This resulted in the diversion vent opening at 15:42:06. Since the pilot temperature was still above 300 F, the VDU control system attempted to relight the pilot without operator intervention. The relight was successful and the diversion vent closed at 15:43:29. During this event, less than 0.05 pounds of VOCs were vented to the bypass stack.³

In response to this event, the facility instructed operators to make gradual changes in the temperature controller setpoint for removal of the heavier hydrocarbon components from the treated gas to moderate the rate of warm header heat content changes during liquefaction startup and reduce instability within the VDU. Further, at this time, the facility was continuing to assess methods for improving the VDU's reliability with the OEM's support, and additional outreach to the OEM was made after this event. The data gathered from this event was used in the ongoing tuning of the flare. Since this event, there has not been a diversion event resulting from a loss of flame on the small warm burner due to the rate of heat input increases during liquefaction startup.

Additionally, the facility subsequently made several changes to the primary and secondary controller settings to reduce the size of the step changes in combustion air flow when transitioning between the two controllers, as described in our letter to you on February 24, 2025. While this change was made in response to an event occurring on February 1, 2024, it also serves as additional protection against recurrence of the type of scenario that occurred on September 22, 2023.

² The amount of diverted VOC emissions was 0.20% of the NOC No. 11386A Condition 15.b flare VOC limit of 244 pounds per day.

³ The amount of diverted VOC emissions was less than 0.02% of the NOC No. 11386A Condition 15.b flare VOC limit of 244 pounds per day.

Conclusion

We appreciate this opportunity to provide additional information to you regarding the above events and GNOVs. PSE takes these events very seriously and took immediate steps to minimize any uncontrolled emissions. In all diversion instances, the flare controls implemented real time safety protocols to protect personnel and the facility. Corrective actions were identified and implemented in a timely manner including making process changes to reduce the risk of future upsets and revising settings and processes to improve performance and further reduce the likelihood of diversion events in the future. At no time did these bypasses—or the emissions associated with them— threaten Tacoma LNG’s compliance with its permit limits or cause or contribute to air pollution in such a quantity as to create a threat to the public health or welfare.

If you have any questions after reviewing this letter, I can be reached at (425) 213-6638 or at Dustin.Cornidez-Pittman@pse.com.

Sincerely,



Dustin Cornidez-Pittman
Manager Environmental Services
Puget Sound Energy

CC: Lorna Luebbe
Sara Leverette
Ruth Juris
Mark Carlson
Thor Angle
Allison Watkins Mallick



PUGET SOUND

Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001583

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001583
Violation Date: 4/21/2024	Time:	Certified Mail #: 9214 8901 9403 8307 3043 22
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:

NC Order of Approval 11386A Cond. 10 The following processes shall have their vapor waste gases routed to the enclosed ground flare before being released to the atmosphere: a. Feed Gas Compressor, b. Amine Pretreatment Unit, c. Heavies Storage and fuel system, d. Liquefaction, e. Post Load Purge

Alleged Reason(s) for Violation:


On April 21st, 2024 while the facility was in liquefaction, a malfunction in the liquid hydrocarbon collection drum level controller caused a rapid increase in heat input to the warm burner. This resulted in instability in the fuel-to-air ratio which led to flame outs of all VDU burners. Consequentially, warm and cold stream waste gases were safely directed to their associated diversion vents during the required VDU cool down and purge which lasted 31 minutes.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By: 
 Ally Graham, Inspector, 206-689-4064
 AlasdairG@psc Clean Air Agency

Date: 3/27/2025

Received By: 
 Signature
 (Signing is not an admission of guilt)

Dustin Cornidez-Pittman
Print Name

4/1/25
Date



PUGET SOUND

Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001584

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001584
Violation Date: 1/12/2024	Time:	Certified Mail #: 9214 8901 9403 8307 3093 34
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:

NC Order of Approval 11386A Cond. 10 The following processes shall have their vapor waste gases routed to the enclosed ground flare before being released to the atmosphere: a. Feed Gas Compressor, b. Amine Pretreatment Unit, c. Heavies Storage and fuel system, d. Liquefaction, e. Post Load Purge

Alleged Reason(s) for Violation:


On January 12th, 2024, while the facility was shut down for maintenance and no processing activities were occurring, an unexpected high-pressure condition occurred due to the build-up of unprocessed pipeline natural gas within the system. A portion of the unprocessed pipeline natural gas (i.e., not waste gas) was routed through the diversion vent rather than the PRV over the course of 26 minutes.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By:  **Date:** 3/27/2025

Ally Graham, Inspector, 206-689-4064
AlasdairG@psc Clean Air.gov

Received By:  Dustin Cornidez-Pittman 4/1/25

Signature Print Name Date

(Signing is not an admission of guilt)



PUGET SOUND

Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001586

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001586
Violation Date: 9/22/2023	Time:	Certified Mail #: 9214 8901 9403 8307 3100 64
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:

NC Order of Approval 11386A Cond. 10 The following processes shall have their vapor waste gases routed to the enclosed ground flare before being released to the atmosphere: a. Feed Gas Compressor, b. Amine Pretreatment Unit, c. Heavies Storage and fuel system, d. Liquefaction, e. Post Load Purge

Alleged Reason(s) for Violation:


A flare diversion event occurred on September 22nd for approximately 93 seconds (opening at 15:42:06 and closing at 15:43:29) as the result of the pilot going out.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By:  **Date:** 3/27/2025

Ally Graham, Inspector, 206-689-4064
AlasdairG@psc Clean Air.gov

Received By:  Dustin Cornidez-Pittman 4/1/25

Signature Print Name Date

(Signing is not an admission of guilt)

April 21, 2025

BY E-MAIL

Puget Sound Clean Air Agency
Attn: Alasdair Graham, Inspector
1904 3rd Avenue, Suite 104
Seattle, WA 98101-3317
Inspection@psccleanair.gov; AlasdairG@psccleanair.gov

**Re: Tacoma LNG (Registration No. 30022)
GNOV No. 3-A001595**

Dear Mr. Graham,

Puget Sound Energy, Inc. (PSE) received General Notice of Violation No. 3-A001595 (GNOV) from the Puget Sound Clean Air Agency (PSCAA) relating to production activities on May 18, 2023 at the Tacoma Liquefied Natural Gas (Tacoma LNG) facility. This letter responds to the Corrective Action Order in the GNOV requesting that PSE identify the actions taken to correct the violation and achieve compliance with PSCAA's regulations. The allegations in the GNOV pertain to a self-reported event.

Notice of Construction (NOC) No. 11386A Condition 33 states that the owner/operator shall not produce and/or process more than 250,000 gallons of LNG per calendar day. Tacoma LNG has never produced more than 250,000 gallons per day (gpd) of LNG from pipeline natural gas. This means that we have never put more than 250,000 gallons of new natural gas into our system, consistent our understanding of Condition 33. On May 18, 2023, Tacoma LNG produced 234,076 gallons of LNG from pipeline natural gas and recycled 23,432 gallons of boil-off gas (BOG) from the storage tank back into the tank. Including BOG, 257,508 gallons of LNG were added to our storage tank on that day.

At Tacoma LNG, processed LNG is stored in a dedicated storage tank, where a natural phenomenon called boil-off occurs daily. During boil-off, a small percentage of the stored LNG converts back from liquid into gas. Since the BOG was previously processed, it bypasses the standard processing steps that generate air emissions. To reuse the BOG, it is then recompressed and blended with treated pipeline gas for additional LNG production.

On August 11, 2023, PSE took a conservative approach in reporting to PSCAA that operations exceeded the 250,000 gpd of produced and/or processed LNG limit specified in Condition 33. At the time of the report, PSE's interpretation of Condition 33 was that this limit applied specifically to pipeline gas going through the initial processing steps (amine pretreatment and heavy

hydrocarbon removal), rather than the total amount of LNG entering the storage tank, which includes both newly processed natural gas and the reliquefied BOG as described above.

After hearing about PSCAA's potential disagreement with this interpretation, the Tacoma LNG team worked diligently to implement interim tracking measures to ensure no more than 250,000 gpd would be added to the tank. The plant also conducted extensive training for shift operators focused on storage tank processes. PSE has had no issue limiting our production to 250,000 gpd, inclusive of BOG, since May 2023. The team additionally implemented the following permanent control measures in September 2023:

1. Installed an early warning system that alerts operators when daily transfers reach 220,000 gallons of LNG, allowing time for the operator to adjust the production rate to ensure that no more than 250,000 gallons of LNG are transferred to the storage tank on any given day;
2. Implemented flow controls set at 170 gallons per minute, which permits no more than 244,800 gpd to transfer to the storage tank; and
3. Added a real-time totalizer that is visible to the operators at all times to track LNG transfers to the storage tank.

Since these corrective actions were taken, there has not been an exceedance of the amount of LNG transferred into the storage tank.

NOC No. 11386A Condition 48 requires that PSE report any permit standard exceedance within 30 days of the end of the month in which the exceedance is discovered. When PSE notified PSCAA on August 11, 2023, PSE understood the daily production limit in Condition 33 to apply only to processed pipeline natural gas but again provided the report out of an abundance of caution. Consistent with this understanding, in May 2024, PSE requested that PSCAA modify the language in Condition 33 to eliminate ambiguity as part of a handful of modifications that PSE generally viewed as minor errors. However, subsequent discussions with PSCAA confirmed the Agency's interpretation that the Condition 33 production limit includes both newly processed pipeline gas and reliquefied LNG entering the storage tank. As a result, PSE withdrew its Condition 33 permit modification request and now understands the Agency's intended scope of Condition 33. In the event we have any future issue with Condition 33 compliance, PSE will submit timely reports.

The additional alarms and real time data will make it clear when the daily limit is being approached. In the unlikely event that the limit is exceeded, the facility will discover it immediately. Additionally, the facility now runs a daily assessment of production to verify how many gallons of LNG have been transferred to the tank. These daily assessments are compiled monthly for review by facility management and PSE staff. This provides an additional check to ensure timely discovery of any production exceedance. Since implementing these revised processes in the fall of 2023, PSE has not submitted any untimely reports.

We appreciate this opportunity to provide additional information to you regarding the above event and GNOV. PSE takes compliance very seriously and has taken timely steps to minimize any similar permit deviations.

If you have any questions after reviewing this letter, I can be reached at (425) 213-6638 or at Dustin.Cornidez-Pittman@pse.com.

Sincerely,

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

Dustin Cornidez-Pittman
Manager Environmental Services
Puget Sound Energy

CC: Lorna Luebbe
Sara Leverette
Ruth Juris
Mark Carlson
Allison Watkins Mallick
Thor Angle



PUGET SOUND
Clean Air Agency

GENERAL NOTICE OF VIOLATION No. 3-A001595

1904 3rd Avenue, Suite 105 Seattle, WA 98101 • p 206.343.8800 toll-free 800.552.3565

Case #:	Registration #: 30022	Violation #: 3-A001595
Violation Date: 5/18/2023	Time:	Certified Mail #: 9214 8901 9403 8309 0174 97
Violation Location (Address): 1001 Alexander Ave E		
City: Tacoma	Zip: 98421	County: Pierce
Responsible Person (Name, Title): Dustin Cornidez-Pittman, Env. Services Manager		
Facility Name (If applicable): Puget Sound Energy		
Mailing Address: P.O. Box 97034, BEL10W		
City, State: Bellevue, WA	Zip: 98009-9734	Phone: (425) 213-6638

Violation of Regulations, WAC, etc.:

NC Order of Approval 11386A Cond. 33 The owner and/or operator shall not produce and/or process more than 250,000 gallons of liquefied natural gas per calendar day.

NC Order of Approval 11386A Cond. 48 The agency shall be notified, in writing, within 30 days of the end of the month in which an exceedance of any emissions limitation and standard identified in these permit conditions is discovered.

Alleged Reason(s) for Violation:

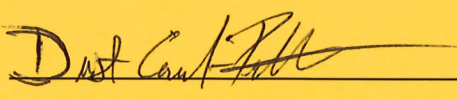
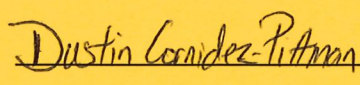
The facility reported an exceedance of the 250,000 gallons of liquified natural gas per day permit limit outlined in Permit Condition 33 of NOC 11386A. On May 18, 2023, there was a total of 234,076 gallons of LNG produced and 23,432 gallons of boil-off gas recycled back into the storage tank. This amounted to 257,508 gallons of LNG being added to the tank on this day.

This report was also due 30 days after the month in which the deviation occurred, so June 30, 2023. Report was received on August 11, 2023. This is also a deviation of permit condition 48.

CORRECTIVE ACTION ORDER: You must take the corrective action described below.

Within 10 days of the date you receive this Notice of Violation, submit a written report describing the action(s) you have taken to correct this violation and achieve compliance with Agency regulations.

Issued By:  **Date:** 4/8/2025
 Ally Graham, Inspector, 206-689-4064
 AlasdairG@psc Clean Air.gov

Received By:   4/11/25