



March 20, 2020

Ms. Diane Kavanaugh-Vetort
Michigan Department of Environment, Great Lakes, and Energy
Jackson District Office
Jackson State Office Building
301 Louis Glick Highway
Jackson, Michigan 49201

Subject: **Advanced Disposal Services - Arbor Hills Landfill, Inc.**
Response to February 27, 2020 Violation Notice

Dear Ms. Kavanaugh-Vetort:

A violation notice (VN) issued by Department of Environment, Great Lakes and Energy (EGLE) dated February 27, 2020 was received by Advanced Disposal Services – Arbor Hills Landfill, Inc. in Northville, Michigan.

Attached please find a written response to each of the issues listed in the VN. The response includes the date and duration of the issue, the cause, corrective actions taken initially and steps to prevent a reoccurrence. Additional information requested by EGLE's February 25, 2020 email to Anthony Testa is also included.

If you have any questions regarding this submittal, please contact me at (248) 412-0704.

Sincerely,
Advanced Disposal Systems - Arbor Hills Landfill, Inc.

Don Kindig
General Manager

Cc: Ms. Jenine Camilleri, AQD EGLE Enforcement Unit Supervisor
Mr. Jay Warzinski, AHLF
Mr. Todd Whittle, AHLF
Mr. Anthony Testa, AHLF

Mr. Randy Frank, AHLF
Mr. Nathan Frank, USEPA
Mr. Kenneth Ruffatto, USEPA
Ms. Mary Ann Dolehanty, EGLE
Mr. Jeff Rathbun, EGLE
Mr. Chris Ethridge, EGLE
Ms. Jenine Camilleri, EGLE
Mr. Lonnie Lee, EGLE
Ms. Alexandria Clark, EGLE
Ms. Diane Kavanaugh Vetort, EGLE
Ms. Melinda Shine, EGLE
Mr. Mike Kovalchick, EGLE

BACKGROUND

Advanced Disposal Services Arbor Hills Landfill, Inc. (“Arbor Hills”) is an active municipal solid waste landfill operating in Washtenaw County, Michigan. The facility is subject to 40 CFR 60 Subpart WWW (the Landfill NSPS) and operates an active gas collection and control system (GCCS). Extracted landfill gas (LFG) is either sent to the third party-operated Fortistar Gas to Energy Plant for combustion in 4 gas turbines (3 of which are connected to heat recovery duct burners) or is controlled on-site by combustion in landfill-owned flares. These include two enclosed flares and one utility flare.

Dates of Event/Explanation of Causes/Duration:

As previously described to EGLE in our February 19, 2020 letter, on February 6, 2020 at approximately 12:30 PM, enclosed flare 391 shut down and the actuating valve that controls landfill gas flow to enclosed flare 391 (a.k.a McGill Flare, West Flare) closed, as designed, to prevent the release of un-combusted landfill gas. Flare 391 shut down as programmed due to a low temperature condition measured at the flare thermocouples. Flare 392 had shut down several minutes earlier for the same reason. Both flare 391 and 392 were in operation to combust gas because several of the turbines/engines at the gas-to-energy plant were offline for maintenance. Landfill staff were notified of the flare shutdowns and were also informed by Fortistar personnel that the landfill flares needed to be re-started because the plant was still completing maintenance on its equipment. Although the site was unable to re-start flare 391 for reasons described further below, it re-started flare 392 and also started flare 393 instead.

Ambient temperature was below freezing when the shutdown of flare 391 and 392 initially occurred. Landfill gas contains water vapor at or near saturation. While the flares are operating, the heat from landfill gas flowing through the pipes after compression keeps this water in vapor form and any liquid is managed through drains in the piping. Water vapor condenses when temperatures below the dew point are encountered. Although it is not possible to confirm, landfill gas condensate is suspected to have frozen in the gas piping in and around the pneumatic valve before the attempt to restart the flare was made. The presence of frozen liquid is believed to have prevented movement of the valve. When the attempt to restart the enclosed flare took place, it could not be restarted and the site contacted the company that installed and maintains the automated control systems, Unison Solutions (Unison).

As indicated in our February 19, 2020 letter, Unison designs and maintains biogas conditioning system projects across the country, and their headquarters and support staff are in Dubuque, Iowa. They accessed the control equipment remotely, identified that the valve wasn't opening, and tried to force open the valve by adjusting a programmed set-point. The attempt to force open the valve remotely was not successful, however, and the flare did not restart. The remote trouble shooting activities by Unison were completed by 1:30 PM on February 6, 2020.

Unfortunately, as indicated in our initial notification letter, when Unison completed their attempts to force the valve open, they returned it to the closure set point of adjacent flare 392 as opposed to the closure set point for flare 391. Arbor Hills site personnel were unaware of this inadvertent change to the valve closure point. Given the unsuccessful efforts to re-start flare 391, the site disabled flare 391 in the control program and made plans to re-visit the valve issue the following week.

Beginning at approximately 10:50 AM on Friday, February 7, 2020, the flow meter associated with Flare 391 began to indicate intermittent gas flow. The facility's data logger recorded this flow but combustion was not occurring (the flare had not been restarted after the troubleshooting activities of the day before). The most likely explanation is that whatever was inhibiting the valve from opening on February 6, 2020 had become dislodged or thawed around the time the data logger began to record gas flow on February 7, 2020 (the recorded gas temperature at TE 391 had risen to near 32 °F). Because the valve had been incorrectly closed to the set point associated with flare 392 as opposed to the correct set point for flare 391, thereby leaving it "cracked open", a small amount of gas flow moved through the valve on an intermittent basis whenever the blowers subsequently delivered landfill gas to one of the other operating flares.

This condition continued until approximately 1:16 PM on Monday, February 10, 2020 when a periodic review of the data by Advanced personnel noted the anomaly and alerted the site. Site personnel went to the flare station and completely closed the valve manually by 1:30 PM and further verified that the flow through the pipe had stopped.

Un-combusted landfill gas was released for a cumulative duration of 28.23 hours over a 74.43-hour timeframe. A total of approximately 0.597 million cubic feet (MMcf) of landfill gas was logged during this period. Calculations for the duration of the event based on flare operating data is included as Attachment 1.

Event Status

No un-combusted flow from Flare 391 has been recorded since the site corrected the issue by fully closing the valve on February 10, 2020. Furthermore, Unison immediately reset the errant 10% value back to 0% for the "valve closed" positioner set-point for enclosed flare 391 upon being notified of the issue on February 10, 2020. The site subsequently tested the start-up and shutdown operation of flare 391 on February 14, 2020 and it operated normally and has continued to operate normally since.

Summary of Additional Actions Taken

The underlying cause triggering the event is most likely a blockage of the fail close pneumatic valve at the inlet to enclosed flare 391, possibly due to freezing of landfill gas condensate in the pipe which prevented the valve from opening to allow for operation of the flare. When troubleshooting this condition, the programmed closure set point for this valve was reset to that of flare 392 as opposed to its correct set point for flare 391. This inadvertent change culminated in the valve being open slightly and resulted in gas emissions after the obstruction thawed.

To address this root cause of the event, the Site completed installation of heat tracing for all three flare valves on February 23, 2020. Additionally, the Site is in the process of ordering custom fit heat blankets for all 3 valves. Dimensions of the valves have been provided to the vendor and the site is awaiting a proposal for their manufacturing and delivery. The Site anticipates that the blankets will be delivered to the Site within a few weeks of finalizing the order. The heat blankets will be installed within a few days of delivery; more quickly if ambient air temperatures are below freezing when received.

Revisions to the SSM plan were made on March 17, 2020 to amend the startup and shutdown procedures for flares and associated valves after maintenance or repairs.

Steps to Prevent Reoccurrence

In addition to the insulation/heat tracing for all flare valves, the facility has implemented a new alarm to alert the Site when this condition (gas flow with no combustion) exists at any of the flares. The alarm is triggered when a flow rate is recorded without a flare “Run” command. It will be identified as a “Low Temperature” and will automatically be sent to designated individuals at ADS and Fortistar on the alarm emails list after 10 minutes of sustained alarm.

ADS has also undergone an internal design review to determine if each of the three existing flare valves are still capable of acting both as flow modulating valves and fail-safe valves. The three valves were designed to fail close upon loss of air pressure and/or control signal. Otherwise, they stay at the % open position automatically determined by the system programming when air pressure is supplied. This occurs when reduced flow to the gas plant is detected, signaling that flare operation is needed. At that point, a valve associated with its respective flare is commanded to open in order to send gas to that flare. When flare operation is no longer needed, the valve defaults to the pre-determined closed set point position to seat the valve and prevent flow. ADS determined that the existing three valves are indeed capable of serving their designed dual purpose – modulating flows and acting as a fail-closed. The incident from February 7 – 10, 2020 was solely due to Unison’s programmer inadvertently re-setting the valve back to the closure set point for flare 392 as opposed to flare 391 during troubleshooting of the valve issue on February 6, 2020.

Response to EGLE Information Request

The site received an email request from EGLE on February 25, 2020 asking for additional information. For clarity, the Department's comments appear below in bold type along with the responses to the issues in the order that they appeared in your email.

- 1. I had asked that the report include the operating status and process data of all the other Control Equipment during the reported event time period.**

Response

Operating data for this flare and the other control devices is provided in Attachments 2 (flare data) and 3 (plant data).

- 2. I had asked that ADS identify/include the specific proposed changes and updates to the SSM Plan as a result of the reported event.**

Response

The amended SSM procedures are provided in Attachment 4.

- 3. ADS' Permit to Install No. 79-17 contains the following condition, "The permittee shall operate a flame detection system in conjunction with the flare in the event that the flame is extinguished, shut-in of all lines feeding the flare shall commence automatically. Operation of the flare shall not be restarted unless the non-continuous pilot flame is reignited. Pilot fuel shall only be propane. (R336.1201(3))". Please submit an explanation of the Enclosed Flare(s) operating and compliance status with this condition during the reported malfunction event.**

Response

Each flare, including 391, is equipped with a flame detection system that is and was functioning normally during the event. Flare 391 was not "running" at the time. As such, no flame detection was necessary or enabled. Flame detection is enabled when the flare is operational. Further, the shut-in valve originally functioned as designed automatically closing on February 6, 2020. Lastly, the flare could not be restarted. It was left in the off (non-operational) or disabled state in the control program. Consequently, the pilot was not engaged. This only occurs when the flare start procedures are enabled.

This event occurred because of a programming error. The site was unaware that a closed valve set point was re-set to the wrong value after troubleshooting. This left the valve slightly ajar while the flare was not "running".

- 4. Corrective Action Plan section of ADS' submittal is currently unacceptable: Other than just a new alarm, it appears that all the related valves (supply valves) for all three Flares need to be replaced or upgraded and made consistent. They should not freeze up in the winter. In addition, it appears the engineered controls need to work in conjunction with the required flame detection system and pilot flame in #3. It is unclear to me from the report how any amount of LFG to the flare was allowed to be emitted un-combusted.**

Response

The Site conducted a test of the automatic shutoff valve associated with flare 391 on February 14, 2020 and it was found to be functioning as designed. No further obstructions like that which occurred on February 6, 2020 have occurred. The valves associated with flares 392 and 393 did not experience any abnormalities; their set points have been reviewed and found to be correct, and there has been no data indicating they are not functioning properly. Therefore, the Site did not run a test of these valves associated with flares 392 and 393 since they are functioning as designed. The site has had several automated start-ups and shutdowns since this February 7-10th incident, all without experiencing any valve or control program issues.

Further, there is no apparent physical damage or wear that warrants replacement. As noted above, heat trace and a heat blanket are being installed to minimize freezing. Lastly, the flares operate via process logic that is initiated by a "RUN" command. Without this command, the flare remains shut-in and no combustion occurs. In this instance, the flare was not operating. Consequently, the flame detection and pilot flame controls were not enabled. There are no flare systems, in any industry, designed to function as EGLE contemplates in the email. All must have a start and a stop for safety reasons. The engineering controls are only engaged after the start command is initiated. Once the "RUN" command is given to a flare, the programmed start procedure begins including a check of all safety interlocks (process input conditions that indicate safe startup). After purging is complete, the pilot ignition sequence begins. Upon igniting the pilot and detecting pilot flame with the flame scanner, the automatic block valve will open supplying landfill gas to the burners. If detection of the flame on the main burner remains, the system continues operating. The flare operating temperature is maintained by adjusting the position of the air damper louvers. Opening the dampers reduces the operating temperature by increasing the amount of quench air, while closing the dampers increases the temperature by decreasing the amount of quench air. Fluctuating waste gas flow rates or varying methane concentrations cause the damper to open or close automatically, thus adjusting the operating temperature. The control sequence consists

of a stack-mounted thermocouple (selected based on gas flow rate) which senses the operating temperature and sends a low voltage signal to the panel mounted temperature indicating controller. This controller sends a 4 - 20 mA signal to an electrically operated actuator on the air louvers. Low temperature failure (established based on performance testing) occurs if the selected monitoring thermocouple detects an operating temperature below the specified low temperature limit. Since the flare was not operating when the event occurred, this condition was never triggered. All flares operate in this manner regardless of industry.

The event occurred solely because of a programming error with the shut-in valve. A new alarm condition has been implemented to warn of this type of event, but this is external to the operating flare controls that engage flame detection and the pilot.

Response to the Violation Notice:

As a general matter, Advanced Disposal Services takes exception to the characterization of the event as “excess emissions”. There are no discrete permit levels of NMOC (either in terms of lbs or tons) established for the flare or facility for NMOC, above which can be characterized as excess.

For clarity, the Department’s comments appear below in italic type along with the responses to the issues in the order that they appeared in the VN.

Item 1: PTI No. 79-17 Condition I.1. NMOC emission limit, WWW 40 CFR 60.752(b)(2)(iii)(B), WWW 40 CFR 60.754(d), WWW 40 CFR 60.758(b)(2)

Response:

While un-combusted gas was emitted out the enclosed flare stack for flare 391, Advanced Disposal Services does not agree that a NMOC emission limit violation occurred as it relates to the condition cited. Enclosed flare 391 is designed and operated to meet PTI No. 79-17 Condition I.1., WWW 40 CFR 60.752(b)(2)(iii)(B), WWW 40 CFR 60.754(d), and WWW 40 CFR 60.758(b)(2). Further, a performance test was completed on 12/19/2019 demonstrating that it achieved less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. At no time during the event did the flare operate. Consequently, it did not operate below the minimum temperature established during the performance test. Therefore, while we don’t dispute un-combusted gas was emitted, it could not have violated these specific conditions.

Item 2: *PTI No. 79-17 Condition III.3, WWW 40 CFR 60.753(f), AAAA 40 CFR 63.1955(a); Comment: Failed to operate the flare when the collected gas was routed to it.*

Response: The routing of collected gas to an inoperable flare was due to a partially open valve that had not been properly re-set to its correct closed position during prior troubleshooting operations. This was an inadvertent human error and has since been corrected.

Item 3: *PTI No. 79-17 Condition III.6, WWW 40 CFR 60.755(e), AAAA 40 CFR 63.1955(a); Comment: Period of start-up, shutdown or malfunction duration exceeded one hour.*

Response: Advanced Disposal Services disagrees that the timeframe allowed by the NSPS for this type of malfunction is only one hour. The malfunction involved an incorrect setting on a valve, which is a component of the landfill gas collection system, and not of the control device. 40 CFR 60.755(e) actually states the following with respect to malfunctions of the collection system:

The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

As stated earlier in this response letter, the total duration of the malfunction event directly associated with emissions was 1.18 days out of a 3.1-day period. This is less than the allotted 5-day timeframe for collection system malfunctions.

Item 4: *PTI No. 79-17 Condition III.7; Comment: Failed to operate flame detection system. Flare was operated without the non-continuous pilot flame ignited.*

Response: Advanced Disposal Services disagrees that it failed to operate a flame detection system or operated the flare without a non-continuous pilot flame ignited. See above response to EGLE Additional Information Request.

Item 5: *R336.1910 (Rule 910); Comment: An air-cleaning device shall be installed, maintained and operated in a satisfactory manner and in accordance with these rules and existing law.*

Response: Advanced Disposal Services has installed, maintained and operates the three flares (a.k.a. “air cleaning devices”) in accordance with manufacturer’s recommendations and good engineering practice. The malfunction event did not involve the air-cleaning devices sited in this item; rather, the malfunction involved a component of the collection system (valve).

EGLE stated informally that there were 32 odor complaints logged between February 7 – 10, 2020, during the malfunction duration, and stated that “uncontrolled LFG emissions from the flare are likely to have contributed to off-site odors”.

Response: The Site receives complaints via a web-based complaint system managed by the Conservancy Initiative. The Site logs each complaint, detailing the date received, time received, the nature of the complaint (i.e. odor description), and the location of the complaint. A table of the 31 complaints associated with the timeframe of this event is included in Attachment 5. The Site reviewed the time logged for each complaint against the flare data to determine if the complaint could be attributed to a period of time identified by the facility as part of the incident. If the time period was congruent, the Site next reviewed meteorological data from the Detroit Metropolitan Wayne County Airport station to determine the wind speed/direction during that timeframe, and whether the residence registering the complaint would have been upwind or downwind from the flare compound. The resulting investigation showed the following with respect to the complaints:

- Two of the complaints on February 7, 2020 occurred almost three hours before the onset of the incident at 10:50 a.m.
- Twelve of the complaints on February 10, 2020 occurred four hours or more after the cessation of the incident at 13:16 p.m.
- Eight of the complaints on February 9, 2020 occurred during an extended period of time when there was no release of gas at all (over 28 hours).
- Of the remaining nine complaints that occurred during a period of time corresponding to a release of gas on February 7, 2020, a review of the complaint location and the wind direction during that time showed that none of the addresses associated with the complaints were directly downwind of the flare compound. The neighborhood with these addresses is located to the northeast of the flare compound, and the wind direction was from the northwest or the west on February 7, 2020.

Based on our analyses, it is unlikely that the odor complaints logged by EGLE were due to this particular issue.

The Site believes that it has taken aggressive actions to address the issue which led up to the malfunction, and has put systems in place to prevent future such occurrences.

Attachment 1
Event Duration Calculations

Date & Time Stamp	Flare 391 Waste Temperature TE 391 (deg F)	Flare 391 Gas Flow FIT 391 (SCFM)	Event Duration (minutes)
2/6/2020 10:06	1797.08	3673.13	0
2/6/2020 10:20	1748.58	3599.38	0
2/6/2020 10:34	1821.58	3664.69	0
2/6/2020 10:48	1798.08	3550.94	0
2/6/2020 11:02	1745.08	3334.38	0
2/6/2020 11:16	1875.08	3667.19	0
2/6/2020 11:30	1805.58	3622.50	0
2/6/2020 11:44	1872.08	3545.31	0
2/6/2020 11:58	1753.08	3289.69	0
2/6/2020 12:12	1589.08	2730.31	0
2/6/2020 12:26	625.58	0.00	0
2/6/2020 12:40	209.08	0.00	0
2/6/2020 12:54	104.08	0.00	0
2/6/2020 13:08	66.58	0.00	0
2/6/2020 13:22	49.58	0.00	0
2/6/2020 13:36	42.58	0.00	0
2/6/2020 13:50	37.58	0.00	0
2/6/2020 14:04	34.58	0.00	0
2/6/2020 14:18	33.08	0.00	0
2/6/2020 14:32	34.58	0.00	0
2/6/2020 14:46	35.08	0.00	0
2/6/2020 15:00	39.08	0.00	0
2/6/2020 15:14	41.08	0.00	0
2/6/2020 15:28	39.08	0.00	0
2/6/2020 15:42	40.08	0.00	0
2/6/2020 15:56	32.58	0.00	0
2/6/2020 16:10	30.08	0.00	0
2/6/2020 16:24	29.08	0.00	0
2/6/2020 16:38	28.58	0.00	0
2/6/2020 16:52	28.08	0.00	0
2/6/2020 17:06	28.08	0.00	0
2/6/2020 17:20	28.08	0.00	0
2/6/2020 17:34	28.08	0.00	0
2/6/2020 17:48	28.58	0.00	0
2/6/2020 18:02	28.08	0.00	0
2/6/2020 18:16	28.58	0.00	0
2/6/2020 18:30	28.08	0.00	0
2/6/2020 18:44	28.08	0.00	0
2/6/2020 18:58	28.08	0.00	0
2/6/2020 19:12	28.08	0.00	0
2/6/2020 19:26	28.08	0.00	0
2/6/2020 19:40	28.08	0.00	0
2/6/2020 19:54	28.58	0.00	0
2/6/2020 20:08	28.58	0.00	0
2/6/2020 20:22	28.08	0.00	0
2/6/2020 20:36	28.08	0.00	0
2/6/2020 20:50	28.58	0.00	0
2/6/2020 21:04	28.58	0.00	0
2/6/2020 21:18	28.58	0.00	0
2/6/2020 21:32	28.58	0.00	0
2/6/2020 21:46	28.58	0.00	0
2/6/2020 22:00	28.58	0.00	0
2/6/2020 22:14	28.58	0.00	0
2/6/2020 22:28	28.58	0.00	0
2/6/2020 22:42	28.58	0.00	0
2/6/2020 22:56	28.58	0.00	0
2/6/2020 23:10	28.58	0.00	0
2/6/2020 23:24	28.58	0.00	0
2/6/2020 23:38	28.08	0.00	0
2/6/2020 23:52	28.08	0.00	0
2/7/2020 0:06	28.08	0.00	0
2/7/2020 0:20	28.08	0.00	0
2/7/2020 0:34	28.08	0.00	0
2/7/2020 0:48	28.08	0.00	0
2/7/2020 1:02	28.08	0.00	0
2/7/2020 1:16	28.08	0.00	0
2/7/2020 1:30	28.08	0.00	0
2/7/2020 1:44	28.08	0.00	0
2/7/2020 1:58	28.08	0.00	0
2/7/2020 2:12	28.08	0.00	0
2/7/2020 2:26	28.08	0.00	0
2/7/2020 2:40	28.08	0.00	0
2/7/2020 2:54	28.08	0.00	0
2/7/2020 3:08	28.08	0.00	0
2/7/2020 3:22	28.08	0.00	0
2/7/2020 3:36	27.58	0.00	0
2/7/2020 3:50	27.58	0.00	0
2/7/2020 4:04	27.08	0.00	0
2/7/2020 4:18	27.08	0.00	0
2/7/2020 4:32	27.08	0.00	0
2/7/2020 4:46	27.08	0.00	0
2/7/2020 5:00	27.08	0.00	0
2/7/2020 5:14	27.58	0.00	0
2/7/2020 5:28	27.58	0.00	0
2/7/2020 5:42	28.08	0.00	0
2/7/2020 5:56	28.08	0.00	0
2/7/2020 6:10	28.58	0.00	0
2/7/2020 6:24	28.58	0.00	0
2/7/2020 6:38	28.58	0.00	0
2/7/2020 6:52	28.58	0.00	0

Date & Time Stamp	Flare 391 Waste Temperature TE 391 (deg F)	Flare 391 Gas Flow FIT 391 (SCFM)	Event Duration (minutes)
2/7/2020 7:06	28.58	0.00	0
2/7/2020 7:20	28.58	0.00	0
2/7/2020 7:34	28.58	0.00	0
2/7/2020 7:48	28.58	0.00	0
2/7/2020 8:02	29.08	0.00	0
2/7/2020 8:16	29.08	0.00	0
2/7/2020 8:30	29.08	0.00	0
2/7/2020 8:44	29.08	0.00	0
2/7/2020 8:58	29.08	0.00	0
2/7/2020 9:12	29.08	0.00	0
2/7/2020 9:26	29.08	0.00	0
2/7/2020 9:40	29.08	0.00	0
2/7/2020 9:54	29.08	0.00	0
2/7/2020 10:08	29.58	0.00	0
2/7/2020 10:22	30.08	0.00	0
2/7/2020 10:36	30.08	0.00	0
2/7/2020 10:50	31.08	152.50	14
2/7/2020 11:04	32.08	364.38	14
2/7/2020 11:18	33.08	348.75	14
2/7/2020 11:32	33.08	307.81	14
2/7/2020 11:46	33.08	312.19	14
2/7/2020 12:00	33.08	340.00	14
2/7/2020 12:14	33.08	0.00	0
2/7/2020 12:28	33.58	387.81	14
2/7/2020 12:42	33.58	0.00	0
2/7/2020 12:56	33.58	315.94	14
2/7/2020 13:10	34.58	371.88	14
2/7/2020 13:24	34.58	396.25	14
2/7/2020 13:38	35.58	364.06	14
2/7/2020 13:52	36.58	322.50	14
2/7/2020 14:06	37.08	0.00	0
2/7/2020 14:20	37.08	296.56	14
2/7/2020 14:34	37.08	366.56	14
2/7/2020 14:48	36.58	377.19	14
2/7/2020 15:02	37.08	370.31	14
2/7/2020 15:16	37.08	360.31	14
2/7/2020 15:30	37.58	386.56	14
2/7/2020 15:44	37.58	360.31	14
2/7/2020 15:58	37.58	348.44	14
2/7/2020 16:12	37.58	340.94	14
2/7/2020 16:26	37.58	361.88	14
2/7/2020 16:40	37.08	377.50	14
2/7/2020 16:54	37.08	375.63	14
2/7/2020 17:08	36.58	352.50	14
2/7/2020 17:22	36.08	363.75	14
2/7/2020 17:36	35.58	361.56	14
2/7/2020 17:50	35.08	358.13	14
2/7/2020 18:04	34.58	383.13	14
2/7/2020 18:18	34.58	0.00	0
2/7/2020 18:32	33.58	356.88	14
2/7/2020 18:46	33.58	364.69	14
2/7/2020 19:00	33.08	0.00	0
2/7/2020 19:14	33.08	376.25	14
2/7/2020 19:28	32.58	0.00	0
2/7/2020 19:42	32.58	394.38	14
2/7/2020 19:56	32.58	366.56	14
2/7/2020 20:10	31.08	0.00	0
2/7/2020 20:24	30.58	0.00	0
2/7/2020 20:38	30.58	376.56	14
2/7/2020 20:52	31.08	380.94	14
2/7/2020 21:06	31.58	0.00	0
2/7/2020 21:20	31.08	369.38	14
2/7/2020 21:34	31.58	0.00	0
2/7/2020 21:48	31.08	309.06	14
2/7/2020 22:02	31.58	371.88	14
2/7/2020 22:16	30.58	282.50	14
2/7/2020 22:30	30.58	376.88	14
2/7/2020 22:44	30.58	172.19	14
2/7/2020 22:58	30.08	370.94	14
2/7/2020 23:12	30.08	0.00	0
2/7/2020 23:26	29.58	310.00	14
2/7/2020 23:40	30.08	371.56	14
2/7/2020 23:54	29.58	377.50	14
2/8/2020 0:08	30.08	366.88	14
2/8/2020 0:22	30.08	116.25	14
2/8/2020 0:36	29.58	376.56	14
2/8/2020 0:50	30.08	0.00	0
2/8/2020 1:04	29.08	0.00	0
2/8/2020 1:18	29.08	401.56	14
2/8/2020 1:32	29.58	371.25	14
2/8/2020 1:46	29.08	0.00	0
2/8/2020 2:00	29.58	373.75	14
2/8/2020 2:14	29.58	0.00	0
2/8/2020 2:28	29.08	362.50	14
2/8/2020 2:42	29.08	0.00	0
2/8/2020 2:56	29.08	385.63	14
2/8/2020 3:10	29.58	347.50	14
2/8/2020 3:24	29.08	0.00	0
2/8/2020 3:38	29.08	359.69	14
2/8/2020 3:52	29.58	0.00	0

Date & Time Stamp	Flare 391 Waste Temperature TE 391 (deg F)	Flare 391 Gas Flow FIT 391 (SCFM)	Event Duration (minutes)
2/8/2020 4:06	29.08	0.00	0
2/8/2020 4:20	29.58	355.63	14
2/8/2020 4:34	30.08	379.06	14
2/8/2020 4:48	29.58	0.00	0
2/8/2020 5:02	29.58	381.88	14
2/8/2020 5:16	29.58	0.00	0
2/8/2020 5:30	29.08	330.94	14
2/8/2020 5:44	29.58	388.44	14
2/8/2020 5:58	29.08	0.00	0
2/8/2020 6:12	29.08	361.88	14
2/8/2020 6:26	29.58	356.25	14
2/8/2020 6:40	29.58	362.81	14
2/8/2020 6:54	28.08	0.00	0
2/8/2020 7:08	27.58	369.38	14
2/8/2020 7:22	27.08	0.00	0
2/8/2020 7:36	26.58	381.25	14
2/8/2020 7:50	27.08	371.56	14
2/8/2020 8:04	26.58	0.00	0
2/8/2020 8:18	25.58	0.00	0
2/8/2020 8:32	25.08	0.00	0
2/8/2020 8:46	25.08	380.63	14
2/8/2020 9:00	26.08	0.00	0
2/8/2020 9:14	26.08	355.63	14
2/8/2020 9:28	26.08	0.00	0
2/8/2020 9:42	26.08	371.25	14
2/8/2020 9:56	26.08	0.00	0
2/8/2020 10:10	25.58	0.00	0
2/8/2020 10:24	26.08	357.50	14
2/8/2020 10:38	26.58	0.00	0
2/8/2020 10:52	26.08	0.00	0
2/8/2020 11:06	26.08	0.00	0
2/8/2020 11:20	26.08	0.00	0
2/8/2020 11:34	26.08	0.00	0
2/8/2020 11:48	26.08	0.00	0
2/8/2020 12:02	26.58	0.00	0
2/8/2020 12:16	27.08	0.00	0
2/8/2020 12:30	27.58	0.00	0
2/8/2020 12:44	28.58	0.00	0
2/8/2020 12:58	29.08	0.00	0
2/8/2020 13:12	29.58	0.00	0
2/8/2020 13:26	30.08	0.00	0
2/8/2020 13:40	30.58	0.00	0
2/8/2020 13:54	30.58	0.00	0
2/8/2020 14:08	30.08	0.00	0
2/8/2020 14:22	30.08	0.00	0
2/8/2020 14:36	30.08	0.00	0
2/8/2020 14:50	30.08	0.00	0
2/8/2020 15:04	30.08	0.00	0
2/8/2020 15:18	30.08	0.00	0
2/8/2020 15:32	30.08	0.00	0
2/8/2020 15:46	30.08	0.00	0
2/8/2020 16:00	30.08	0.00	0
2/8/2020 16:14	30.08	0.00	0
2/8/2020 16:28	29.58	0.00	0
2/8/2020 16:42	29.08	0.00	0
2/8/2020 16:56	29.08	0.00	0
2/8/2020 17:10	28.58	0.00	0
2/8/2020 17:24	28.58	0.00	0
2/8/2020 17:38	28.08	0.00	0
2/8/2020 17:52	28.08	0.00	0
2/8/2020 18:06	27.58	0.00	0
2/8/2020 18:20	27.08	0.00	0
2/8/2020 18:34	27.08	0.00	0
2/8/2020 18:48	27.08	0.00	0
2/8/2020 19:02	27.08	0.00	0
2/8/2020 19:16	26.58	0.00	0
2/8/2020 19:30	26.58	0.00	0
2/8/2020 19:44	26.58	0.00	0
2/8/2020 19:58	26.58	0.00	0
2/8/2020 20:12	26.58	0.00	0
2/8/2020 20:26	26.08	0.00	0
2/8/2020 20:40	26.08	0.00	0
2/8/2020 20:54	26.08	0.00	0
2/8/2020 21:08	26.08	0.00	0
2/8/2020 21:22	26.08	0.00	0
2/8/2020 21:36	26.08	0.00	0
2/8/2020 21:50	26.58	0.00	0
2/8/2020 22:04	26.58	0.00	0
2/8/2020 22:18	26.58	0.00	0
2/8/2020 22:32	26.58	0.00	0
2/8/2020 22:46	26.58	0.00	0
2/8/2020 23:00	26.58	0.00	0
2/8/2020 23:14	26.58	0.00	0
2/8/2020 23:28	26.58	0.00	0
2/8/2020 23:42	26.58	0.00	0
2/8/2020 23:56	27.08	0.00	0
2/9/2020 0:10	27.08	0.00	0
2/9/2020 0:24	27.08	0.00	0
2/9/2020 0:38	27.08	0.00	0
2/9/2020 0:52	27.08	0.00	0

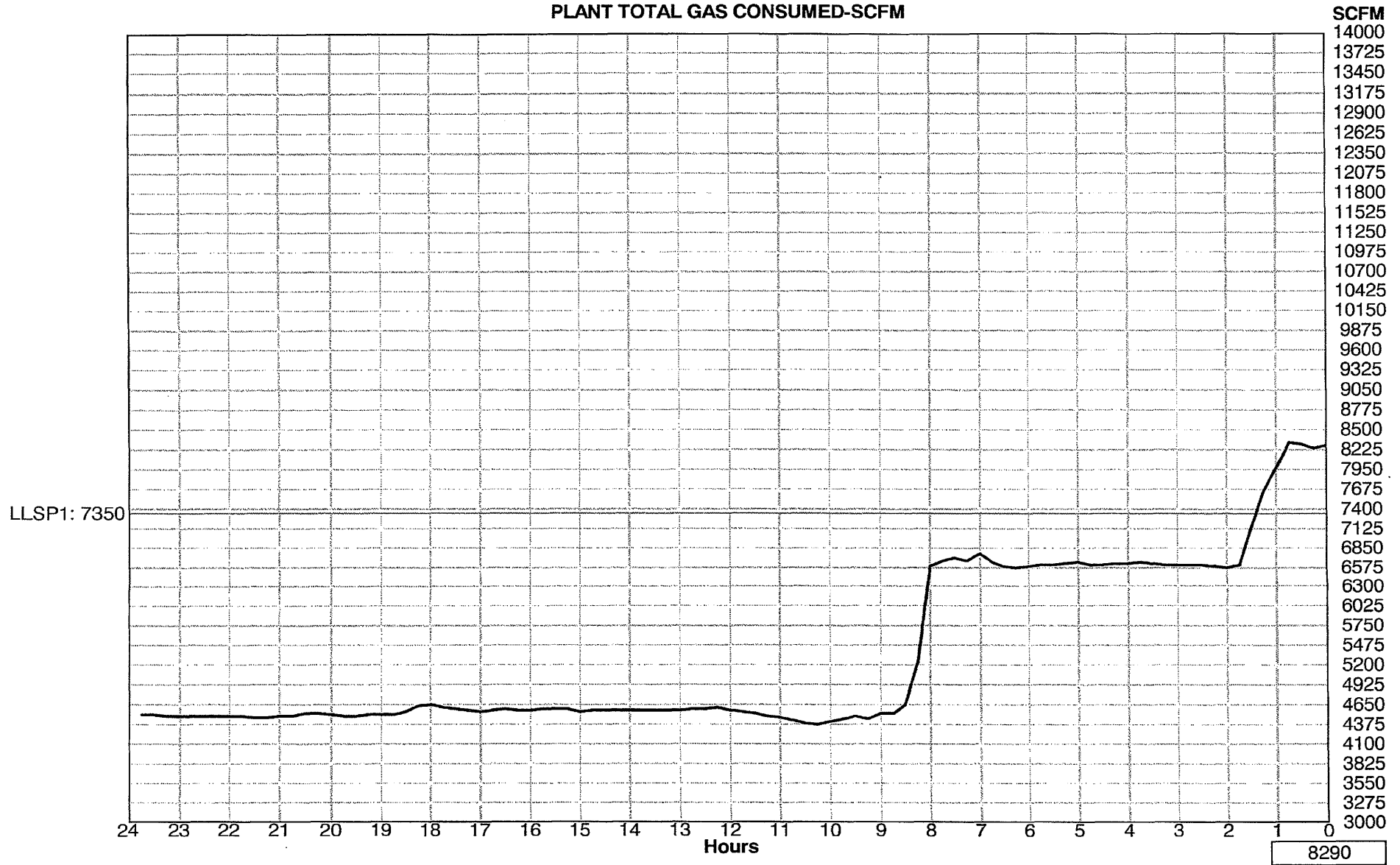
Date & Time Stamp	Flare 391 Waste Temperature TE 391 (deg F)	Flare 391 Gas Flow FIT 391 (SCFM)	Event Duration (minutes)
2/9/2020 1:05	27.08	0.00	0
2/9/2020 1:19	27.08	0.00	0
2/9/2020 1:33	27.08	0.00	0
2/9/2020 1:47	27.08	0.00	0
2/9/2020 2:01	27.08	0.00	0
2/9/2020 2:15	27.08	0.00	0
2/9/2020 2:29	27.08	0.00	0
2/9/2020 2:43	27.08	0.00	0
2/9/2020 2:57	27.08	0.00	0
2/9/2020 3:11	27.08	0.00	0
2/9/2020 3:25	27.08	0.00	0
2/9/2020 3:39	27.08	0.00	0
2/9/2020 3:53	27.08	0.00	0
2/9/2020 4:07	27.08	0.00	0
2/9/2020 4:22	27.58	0.00	0
2/9/2020 4:36	27.58	0.00	0
2/9/2020 4:50	27.58	0.00	0
2/9/2020 5:04	28.08	0.00	0
2/9/2020 5:18	28.08	0.00	0
2/9/2020 5:32	28.08	0.00	0
2/9/2020 5:46	27.58	0.00	0
2/9/2020 6:00	27.08	0.00	0
2/9/2020 6:14	26.08	0.00	0
2/9/2020 6:28	25.58	0.00	0
2/9/2020 6:42	25.58	0.00	0
2/9/2020 6:56	25.58	0.00	0
2/9/2020 7:10	25.58	0.00	0
2/9/2020 7:24	25.08	0.00	0
2/9/2020 7:38	25.08	0.00	0
2/9/2020 7:52	25.08	0.00	0
2/9/2020 8:06	25.08	0.00	0
2/9/2020 8:20	25.08	0.00	0
2/9/2020 8:34	25.58	0.00	0
2/9/2020 8:48	25.58	0.00	0
2/9/2020 9:02	26.08	0.00	0
2/9/2020 9:16	27.08	0.00	0
2/9/2020 9:30	27.08	0.00	0
2/9/2020 9:44	28.08	0.00	0
2/9/2020 9:58	28.58	0.00	0
2/9/2020 10:12	29.08	0.00	0
2/9/2020 10:26	29.58	0.00	0
2/9/2020 10:40	30.08	0.00	0
2/9/2020 10:54	30.58	0.00	0
2/9/2020 11:08	30.58	0.00	0
2/9/2020 11:22	30.58	0.00	0
2/9/2020 11:36	31.08	0.00	0
2/9/2020 11:50	32.08	0.00	0
2/9/2020 12:04	31.58	0.00	0
2/9/2020 12:18	32.08	0.00	0
2/9/2020 12:32	32.08	0.00	0
2/9/2020 12:46	32.58	0.00	0
2/9/2020 13:00	32.58	0.00	0
2/9/2020 13:14	33.08	0.00	0
2/9/2020 13:28	33.08	0.00	0
2/9/2020 13:42	32.58	0.00	0
2/9/2020 13:56	32.08	0.00	0
2/9/2020 14:10	31.58	0.00	0
2/9/2020 14:24	31.58	0.00	0
2/9/2020 14:38	31.58	0.00	0
2/9/2020 14:52	31.58	0.00	0
2/9/2020 15:06	32.08	392.19	14
2/9/2020 15:20	32.08	0.00	0
2/9/2020 15:34	32.58	393.44	14
2/9/2020 15:48	32.58	375.31	14
2/9/2020 16:02	33.08	0.00	0
2/9/2020 16:16	32.58	0.00	0
2/9/2020 16:30	32.08	0.00	0
2/9/2020 16:44	31.58	0.00	0
2/9/2020 16:58	31.08	0.00	0
2/9/2020 17:12	30.58	0.00	0
2/9/2020 17:26	30.58	0.00	0
2/9/2020 17:40	30.08	0.00	0
2/9/2020 17:54	30.08	386.88	14
2/9/2020 18:08	30.58	0.00	0
2/9/2020 18:22	30.58	344.69	14
2/9/2020 18:36	30.58	351.88	14
2/9/2020 18:50	31.08	384.06	14
2/9/2020 19:04	31.58	0.00	0
2/9/2020 19:18	31.08	0.00	0
2/9/2020 19:32	31.58	369.06	14
2/9/2020 19:46	31.58	0.00	0
2/9/2020 20:00	31.08	0.00	0
2/9/2020 20:14	31.08	0.00	0
2/9/2020 20:28	31.08	0.00	0
2/9/2020 20:42	31.08	0.00	0
2/9/2020 20:56	31.58	0.00	0
2/9/2020 21:10	31.58	0.00	0
2/9/2020 21:24	32.08	0.00	0
2/9/2020 21:38	32.08	0.00	0
2/9/2020 21:52	32.58	0.00	0

Date & Time Stamp	Flare 391 Waste Temperature TE 391 (deg F)	Flare 391 Gas Flow FIT 391 (SCFM)	Event Duration (minutes)
2/9/2020 22:06	32.58	0.00	0
2/9/2020 22:20	32.58	0.00	0
2/9/2020 22:34	32.58	0.00	0
2/9/2020 22:48	32.58	0.00	0
2/9/2020 23:02	33.08	379.38	14
2/9/2020 23:16	33.08	0.00	0
2/9/2020 23:30	33.08	327.19	14
2/9/2020 23:44	33.58	370.00	14
2/9/2020 23:58	34.08	0.00	0
2/10/2020 0:12	35.58	382.19	14
2/10/2020 0:26	35.58	390.00	14
2/10/2020 0:40	36.08	364.06	14
2/10/2020 0:54	36.08	0.00	0
2/10/2020 1:08	35.58	0.00	0
2/10/2020 1:22	35.08	0.00	0
2/10/2020 1:36	35.08	0.00	0
2/10/2020 1:50	36.08	372.50	14
2/10/2020 2:04	36.58	366.56	14
2/10/2020 2:18	37.08	365.00	14
2/10/2020 2:32	37.08	379.69	14
2/10/2020 2:46	37.58	385.63	14
2/10/2020 3:00	37.58	350.00	14
2/10/2020 3:14	37.08	110.94	14
2/10/2020 3:28	37.08	323.44	14
2/10/2020 3:42	37.08	340.00	14
2/10/2020 3:56	37.58	354.69	14
2/10/2020 4:10	38.08	351.88	14
2/10/2020 4:24	37.58	0.00	0
2/10/2020 4:38	37.08	349.06	14
2/10/2020 4:52	37.58	365.31	14
2/10/2020 5:06	37.08	212.19	14
2/10/2020 5:20	37.58	380.00	14
2/10/2020 5:34	37.08	0.00	0
2/10/2020 5:48	36.58	0.00	0
2/10/2020 6:02	36.58	390.31	14
2/10/2020 6:16	37.58	360.63	14
2/10/2020 6:30	38.08	360.31	14
2/10/2020 6:44	38.08	362.81	14
2/10/2020 6:58	38.08	370.63	14
2/10/2020 7:12	38.08	349.38	14
2/10/2020 7:26	37.58	0.00	0
2/10/2020 7:40	36.58	208.75	14
2/10/2020 7:54	36.58	353.44	14
2/10/2020 8:08	36.08	0.00	0
2/10/2020 8:22	35.58	352.81	14
2/10/2020 8:36	36.08	0.00	0
2/10/2020 8:50	35.58	337.19	14
2/10/2020 9:04	35.58	368.44	14
2/10/2020 9:18	35.08	0.00	0
2/10/2020 9:32	34.58	0.00	0
2/10/2020 9:46	34.08	0.00	0
2/10/2020 10:00	33.58	0.00	0
2/10/2020 10:14	33.58	0.00	0
2/10/2020 10:28	33.58	0.00	0
2/10/2020 10:42	33.58	385.31	14
2/10/2020 10:56	34.08	370.00	14
2/10/2020 11:10	35.08	376.88	14
2/10/2020 11:24	35.08	361.88	14
2/10/2020 11:38	35.58	374.38	14
2/10/2020 11:52	35.08	0.00	0
2/10/2020 12:06	34.58	0.00	0
2/10/2020 12:20	35.08	362.81	14
2/10/2020 12:34	35.58	366.88	14
2/10/2020 12:48	36.58	367.81	14
2/10/2020 13:02	36.08	286.88	14
2/10/2020 13:16	36.08	363.44	14
2/10/2020 13:30	36.08	0.00	0
2/10/2020 13:44	35.08	0.00	0
2/10/2020 13:58	35.58	0.00	0
2/10/2020 14:12	35.58	0.00	0
2/10/2020 14:26	35.08	0.00	0
			1694 minutes
			28.23 hours

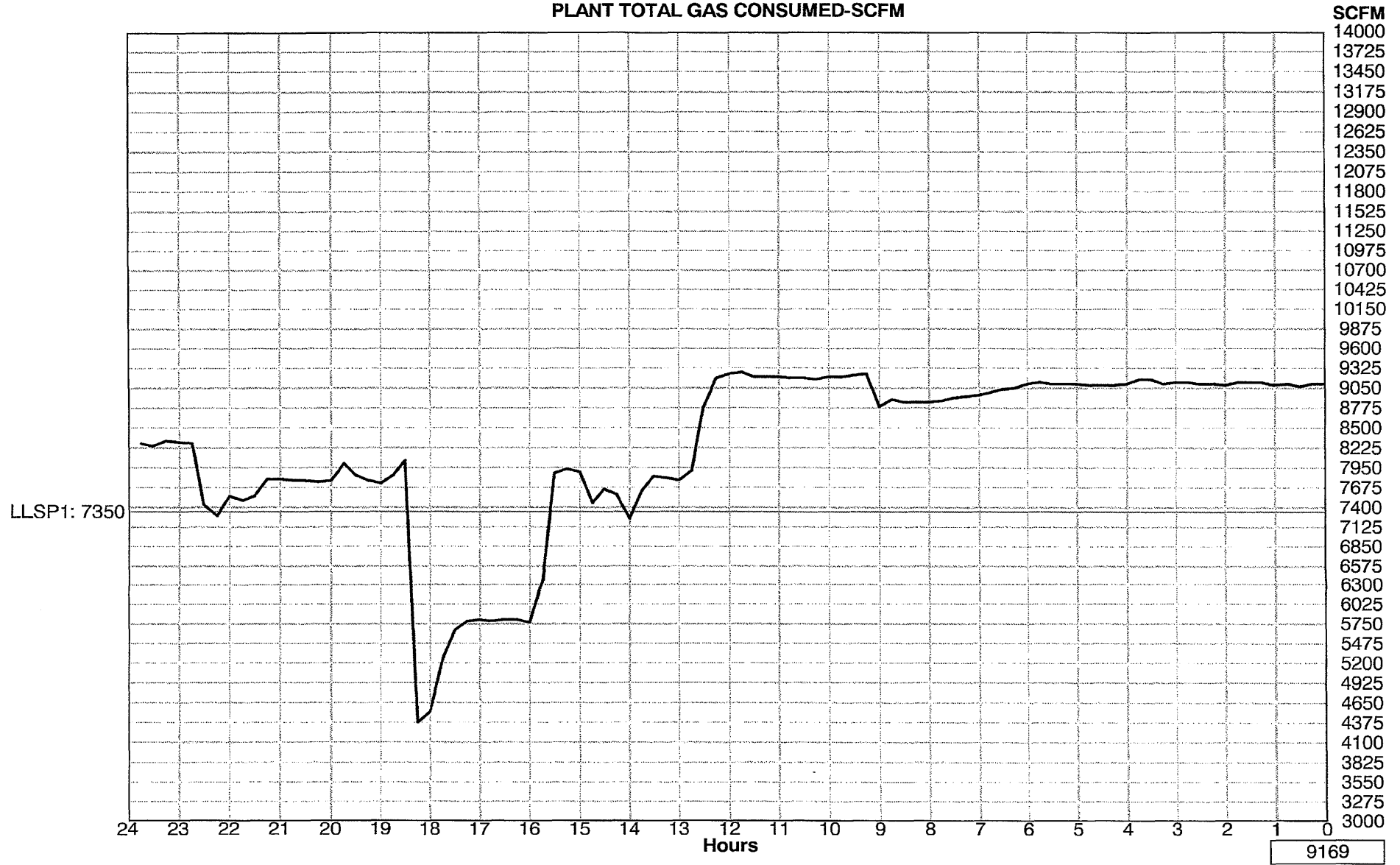
Attachment 2
All Flare Operating Data

Attachment 3
Gas Plant Operating Data

PLANT TOTAL GAS CONSUMED-SCFM



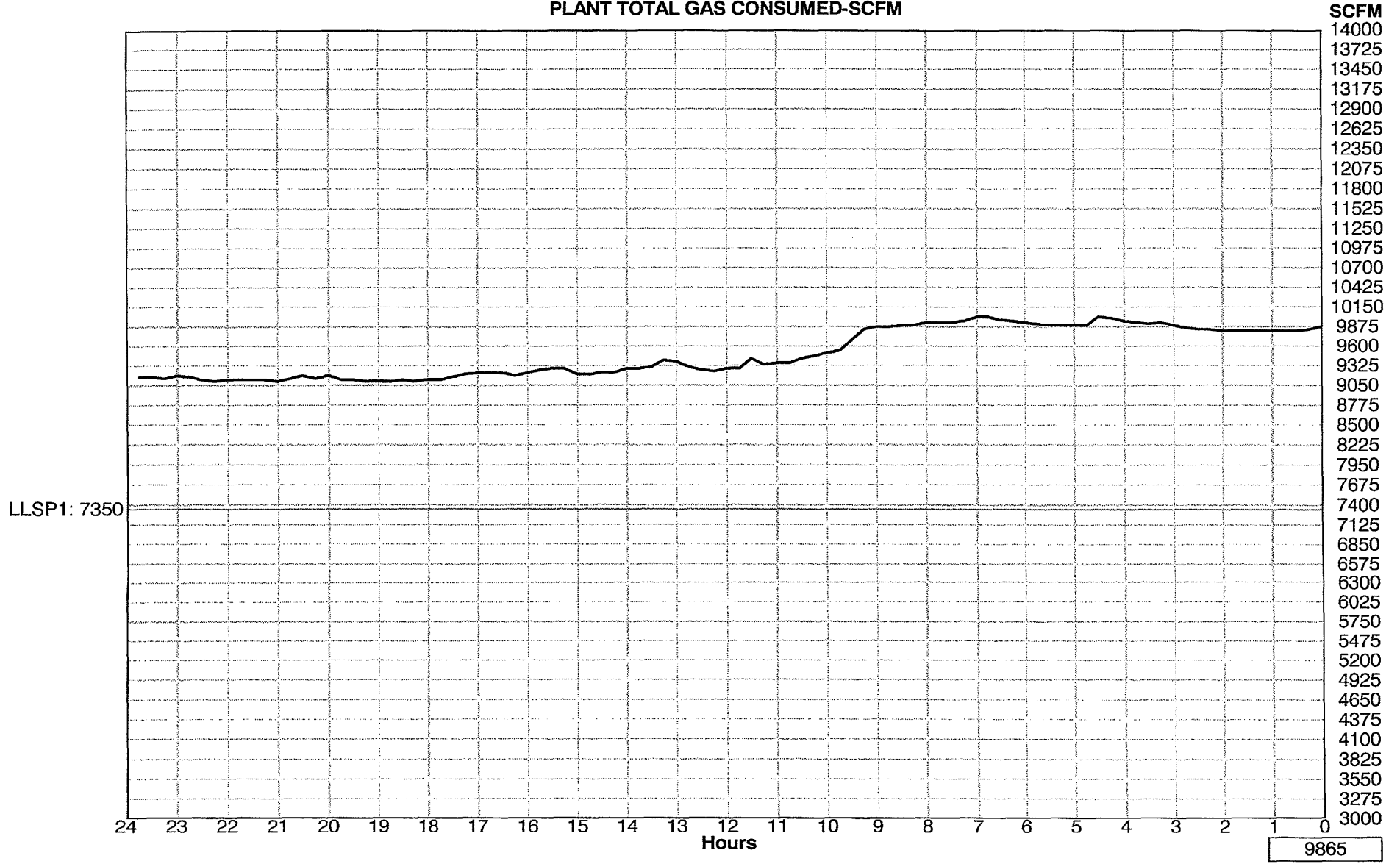
PLANT TOTAL GAS CONSUMED-SCFM



LLSP1: 7350

9169

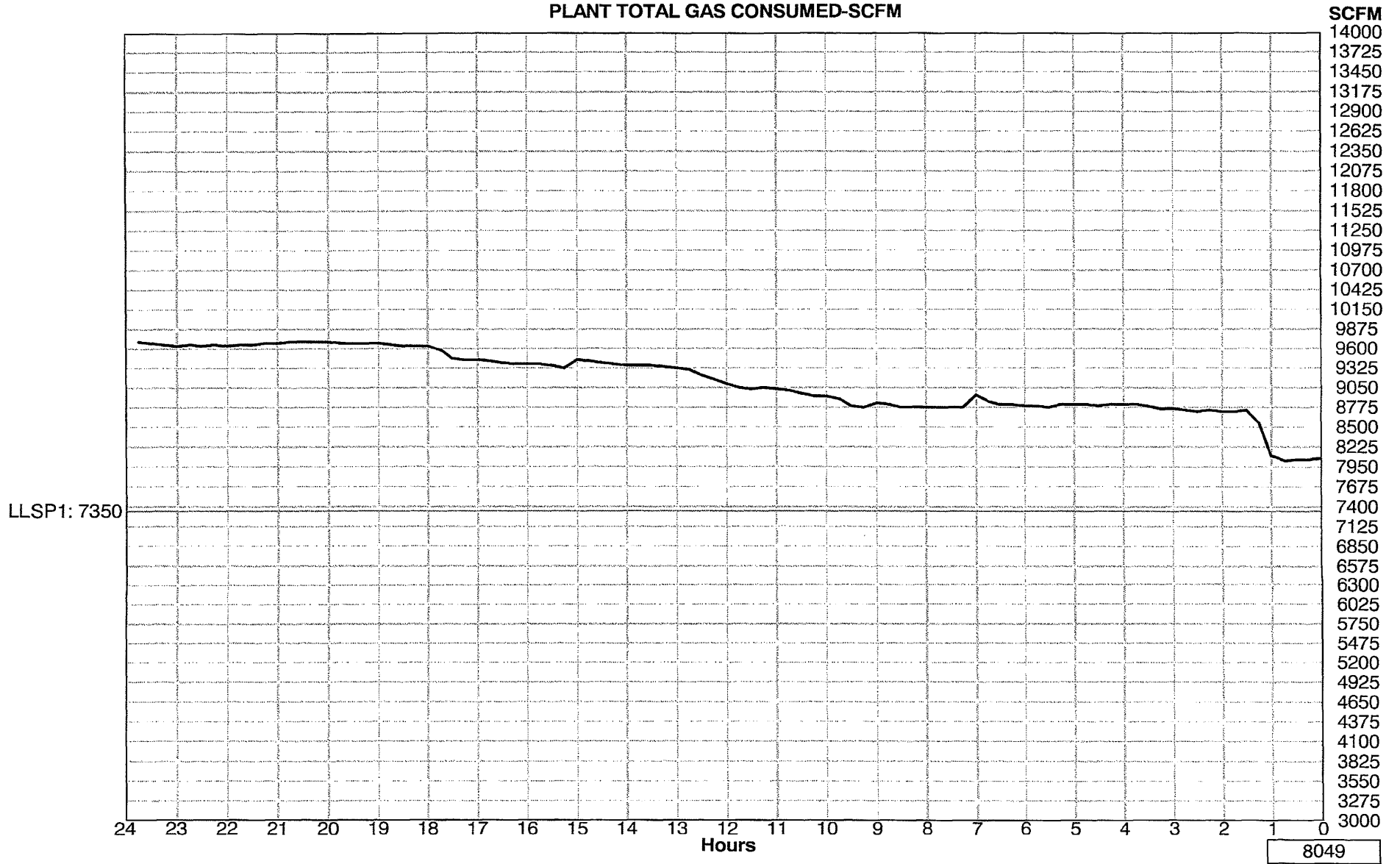
PLANT TOTAL GAS CONSUMED-SCFM



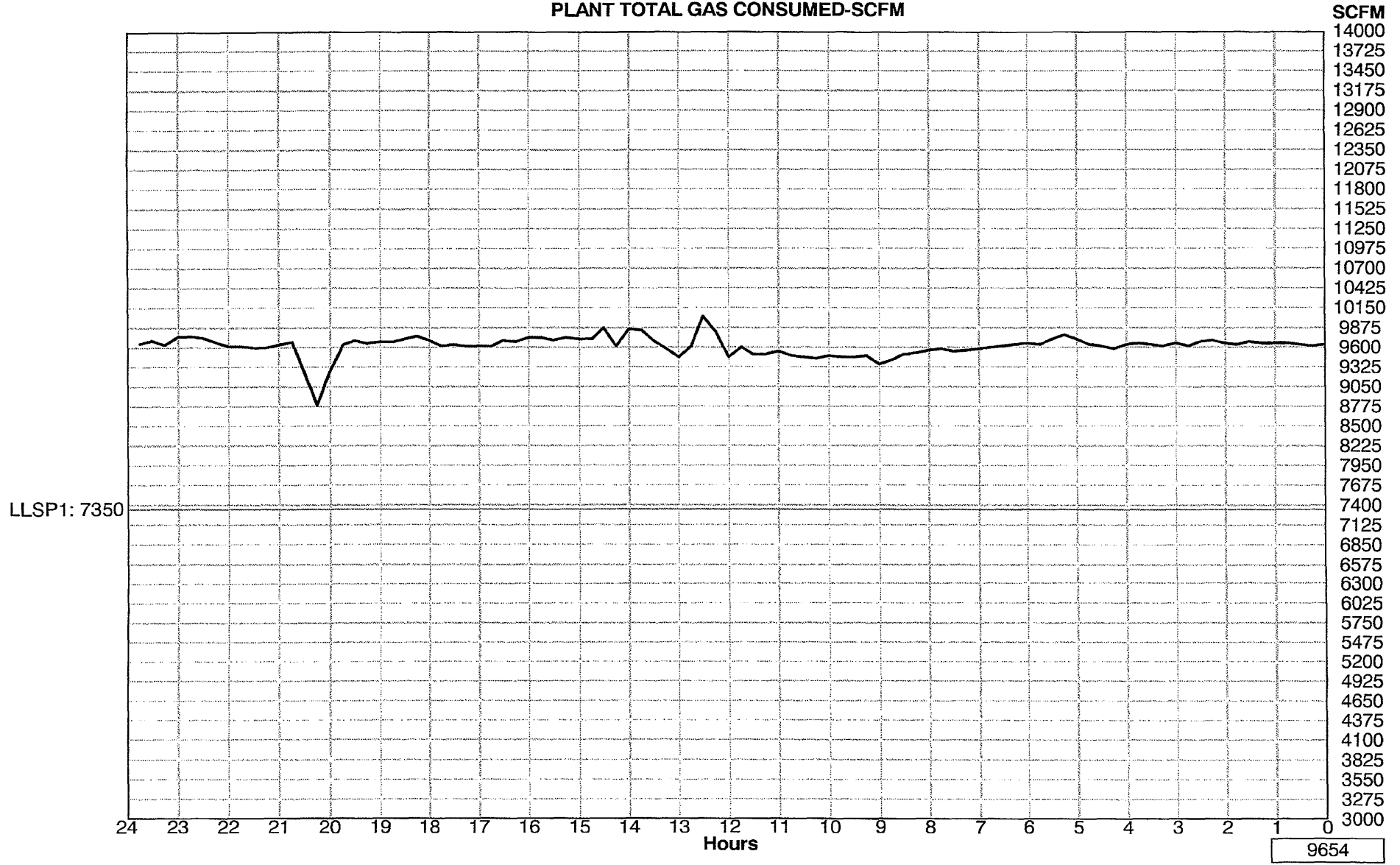
LLSP1: 7350

9865

PLANT TOTAL GAS CONSUMED-SCFM



PLANT TOTAL GAS CONSUMED-SCFM



Attachment 4
Updated SSM Pages

Municipal Solid Waste Landfill Gas Collection and Control System

Startup, Shutdown, and Malfunction Plan

Prepared in accordance with the:

**National Emission Standards for Hazardous Air Pollutants
40 C.F.R. §63.6(e)(3)**

Prepared for:

Facility: Advanced Disposal Services-Arbor Hills Landfill, Inc.
Address: 10690 Six Mile Road
Northville, MI 48167

Date: January 16, 2003

This document identifies the procedures for conducting startups, shutdowns or addressing malfunctions of the municipal solid waste landfill gas collection and control system in a timely and safe manner.



Revision: 4
Revision Date: 3/17/20

Revised by: Dana A Oleniacz, EIL

4 STANDARD OPERATING PROCEDURES

4.1 Start-up SOP

A **Startup** means the setting in operation of an affected source or portion of an affected source for any purpose. (§63.2)

Standard Operating Procedure: Start-up

1. Ensure that there are no unsafe conditions present.
2. Contact Plant Operator in charge.
3. Ensure that the system is ready to start by one or more of the following:
 - a. Valves are in correct operating position.
 - b. Levels, pressures, temperatures are within normal starting range.
 - c. Alarms are cleared.
 - d. Power is on and available to control panel and energized equipment.
 - e. Emergency Stop is de-energized.
 - f. Confirm any adjustments to program control set points performed as part of gas system O&M from prior shutdown or malfunction event have been documented and are in compliance with permit requirements.
4. Initiate start sequence.
5. Observe that system achieves normal operating ranges for levels, pressures, and temperatures. Confirm by reviewing on-screen real-time data.
6. Refer to Operations and Maintenance Manuals if necessary.

4.2 Shutdown SOP

A **Shutdown** means the cessation of an affected source or portion of an affected source or portion of an affected source for any purpose. (§63.2)

Standard Operating Procedure: Shutdown

1. Ensure that there are no unsafe conditions present.
2. Contact Plant Operator in charge.
3. Initiate shutdown sequence by one or more of the following:
 - a. Press Emergency Stop if necessary.
 - b. Close On/ Off switch(es) or Push On/ Off button(s).
 - c. Close adjacent valves if necessary.
 - d. Verify percent open setting that is required for each fail-safe valve to properly seat close, and confirm that setting is met after doing any system O&M involving a manual flare shutdown or malfunction event that impacts the operation of these fail-safe valves.
4. Observe that system achieves normal shutdown ranges for levels, pressures, and temperatures. Confirm by reviewing on-screen real-time data.
5. Refer to Operations and Maintenance Manuals if necessary.

APPENDIX A
SSM PLAN REVISION HISTORY

SSM Plan Revision History

This SSM Plan will be amended if equipment or processes are added that are not covered under the plan or will be revised within 45 days of non-conforming events if the procedures described herein do not adequately address any malfunction or start-up/shutdown events that occur at the facility. A copy of the original plan and all revisions/addendums will be kept on file at the facility for at least five (5) years.

Date of Revision	Reason For Revision
6/15/2011	Entity name changes, New ROP number, new form, updated language from new ROP
6/30/2014	Entity name changes, update contacts and phone numbers
01/04/19	Add new utility flare, update contacts and phone numbers
03/17/20	Revise startup & shutdown procedures

Attachment 5
Analysis of Odor Complaints

Date & Time Stamp	Flare 391 Waste Temperature	Flare 391 Gas Flow	Incident Duration (minutes)	Name of person issuing complaint	Date of call	Time of Call	Address	Does Time of Complaint correspond to recorded incident?	If yes, what is the location of the address in relation to the flare compound (direction)	If yes, what was the windspeed and direction in relation to the flare?	Agree/disagree that specific odor complaint was related to the incident.
2/8/2020 22:04	26.58	0.00									
2/8/2020 22:18	26.58	0.00									
2/8/2020 22:32	26.58	0.00									
2/8/2020 22:46	26.58	0.00									
2/8/2020 23:00	26.58	0.00									
2/8/2020 23:14	26.58	0.00									
2/8/2020 23:28	26.58	0.00									
2/8/2020 23:42	26.58	0.00									
2/8/2020 23:56	27.08	0.00									
2/9/2020 0:10	27.08	0.00									
2/9/2020 0:24	27.08	0.00									
2/9/2020 0:38	27.08	0.00									
2/9/2020 0:52	27.08	0.00									
2/9/2020 1:05	27.08	0.00									
2/9/2020 1:19	27.08	0.00									
2/9/2020 1:33	27.08	0.00									
2/9/2020 1:47	27.08	0.00									
2/9/2020 2:01	27.08	0.00									
2/9/2020 2:15	27.08	0.00									
2/9/2020 2:29	27.08	0.00									
2/9/2020 2:43	27.08	0.00									
2/9/2020 2:57	27.08	0.00									
2/9/2020 3:11	27.08	0.00									
2/9/2020 3:25	27.08	0.00									
2/9/2020 3:39	27.08	0.00									
2/9/2020 3:53	27.08	0.00									
2/9/2020 4:07	27.08	0.00		Anonymous	2/9/2020	4:09	50495 Rose Terrace	No	N/A	N/A	Disagree - No release of gas during this time frame
2/9/2020 4:22	27.58	0.00									
2/9/2020 4:36	27.58	0.00									
2/9/2020 4:50	27.58	0.00									
2/9/2020 5:04	28.08	0.00									
2/9/2020 5:18	28.08	0.00									
2/9/2020 5:32	28.08	0.00									
2/9/2020 5:46	27.58	0.00									
2/9/2020 6:00	27.08	0.00									
2/9/2020 6:14	26.08	0.00		Anonymous	2/9/2020	6:25	50162 Hidden Point	No	N/A	N/A	Disagree - No release of gas during this time frame
2/9/2020 6:28	25.58	0.00									
2/9/2020 6:42	25.58	0.00		Joe Beiser	2/9/2020	6:41	50682 Tamarack Trail	No	N/A	N/A	Disagree - No release of gas during this time frame
2/9/2020 6:56	25.58	0.00									
2/9/2020 7:10	25.58	0.00									
2/9/2020 7:24	25.08	0.00									
2/9/2020 7:38	25.08	0.00									
2/9/2020 7:52	25.08	0.00									
2/9/2020 8:06	25.08	0.00									
2/9/2020 8:20	25.08	0.00		Ryan Davis	2/9/2020	8:38	50698 Tamarack Trail	No	N/A	N/A	Disagree - No release of gas during this time frame
2/9/2020 8:34	25.58	0.00		Brittany Joseph	2/9/2020	8:44	18954 Heather Ridge Dr	No	N/A	N/A	Disagree - No release of gas during this time frame
2/9/2020 8:48	25.58	0.00									
2/9/2020 9:02	26.08	0.00		Janet Styles	2/9/2020	9:01	19016 Bayberry Way	No	N/A	N/A	Disagree - No release of gas during this time frame
2/9/2020 9:16	27.08	0.00		Kathryn Nerowski	2/9/2020	9:20	Maybury Park	No	N/A	N/A	Disagree - No release of gas during this time frame
2/9/2020 9:30	27.08	0.00									
2/9/2020 9:44	28.08	0.00									
2/9/2020 9:58	28.58	0.00									
2/9/2020 10:12	29.08	0.00									
2/9/2020 10:26	29.58	0.00									
2/9/2020 10:40	30.08	0.00									
2/9/2020 10:54	30.58	0.00									
2/9/2020 11:08	30.58	0.00									
2/9/2020 11:22	30.58	0.00		Lyn Hammett	2/9/2020	11:17	18823 Bayberry Way	No	N/A	N/A	Disagree - No release of gas during this time frame

Date & Time Stamp	Flare 391 Waste Temperature	Flare 391 Gas Flow	Incident Duration (minutes)	Name of person issuing complaint	Date of call	Time of Call	Address	Does Time of Complaint correspond to recorded incident?	If yes, what is the location of the address in relation to the flare compound (direction)	If yes, what was the windspeed and direction in relation to the flare?	Agree/disagree that specific odor complaint was related to the incident.
2/10/2020 5:06	37.08	212.19	14								
2/10/2020 5:20	37.58	380.00	14								
2/10/2020 5:34	37.08	0.00									
2/10/2020 5:48	36.58	0.00									
2/10/2020 6:02	36.58	390.31	14								
2/10/2020 6:16	37.58	360.63	14								
2/10/2020 6:30	38.08	360.31	14								
2/10/2020 6:44	38.08	362.81	14								
2/10/2020 6:58	38.08	370.63	14								
2/10/2020 7:12	38.08	349.38	14								
2/10/2020 7:26	37.58	0.00									
2/10/2020 7:40	36.58	208.75	14								
2/10/2020 7:54	36.58	353.44	14								
2/10/2020 8:08	36.08	0.00									
2/10/2020 8:22	35.58	352.81	14								
2/10/2020 8:36	36.08	0.00									
2/10/2020 8:50	35.58	337.19	14								
2/10/2020 9:04	35.58	368.44	14								
2/10/2020 9:18	35.08	0.00									
2/10/2020 9:32	34.58	0.00									
2/10/2020 9:46	34.08	0.00									
2/10/2020 10:00	33.58	0.00									
2/10/2020 10:14	33.58	0.00									
2/10/2020 10:28	33.58	0.00									
2/10/2020 10:42	33.58	385.31	14								
2/10/2020 10:56	34.08	370.00	14								
2/10/2020 11:10	35.08	376.88	14								
2/10/2020 11:24	35.08	361.88	14								
2/10/2020 11:38	35.58	374.38	14								
2/10/2020 11:52	35.08	0.00									
2/10/2020 12:06	34.58	0.00									
2/10/2020 12:20	35.08	362.81	14								
2/10/2020 12:34	35.58	366.88	14								
2/10/2020 12:48	36.58	367.81	14								
2/10/2020 13:02	36.08	286.88	14								
2/10/2020 13:16	36.08	363.44	14								
2/10/2020 13:30	36.08	0.00									
2/10/2020 13:44	35.08	0.00									
2/10/2020 13:58	35.58	0.00									
2/10/2020 14:12	35.58	0.00									
2/10/2020 14:26	35.08	0.00									
			1694 minutes								
			28.23 hours								
				Nick Hippler	2/10/2020	18:09	16466 Westminster Dr				
				Keith Mullins	2/10/2020	17:43	17526 Briar Ridge Ln				
				Brittany Joseph	2/10/2020	17:00	18954 Heather Ridge Ln				
				Anonymous	2/10/2020	19:15	44506 White Pine Ct				
				Anonymous	2/10/2020	20:53	49704 Parkside Dr				
				Chris Jenkins	2/10/2020	19:12	49735 Parkside Dr				
				Rachel Hartman	2/10/2020	19:04	49792 Parkside Dr	No	N/A	N/A	Disagree - Valve shut over 5 hours prior, no further release of gas from the flare.
				Anonymous	2/10/2020	17:15	50495 Rose Terrace				
				Ahmad Heydari	2/10/2020	17:34	50937 Briar Ridge Ln				
				Anonymous	2/10/2020	18:59	6 Mile and Beck Rd				
				Anonymous	2/10/2020	18:02	Ridgewood Elementary				
				Anonymous	2/10/2020	19:34	Steeplechase Entrance				