

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**FCE Summary Report**

<b>Facility :</b> Advanced Disposal Services Arbor Hills Landfill Inc	<b>SRN :</b> N2688
<b>Location :</b> 10690 W. SIX MILE RD	<b>District :</b> Jackson
	<b>County :</b> WASHTENAW
<b>City :</b> NORTHVILLE <b>State:</b> MI <b>Zip Code :</b> 48168	<b>Compliance Status :</b> Non Compliance
<b>Source Class :</b> MAJOR	<b>Staff :</b> Mike Kovalchick
<b>FCE Begin Date :</b> 5/29/2018	<b>FCE Completion Date :</b> 5/29/2019
<b>Comments :</b> Numerous unresolved air and waste (now Material Management) rules and an active source of odorous emissions. An escalated enforcement action is currently being pursued against Advanced and Fortistar which is part of the same stationary source.	

**List of Partial Compliance Evaluations :**

Activity Date	Activity Type	Compliance Status	Comments
05/17/2019	Stack Test	Compliance	Results of NSPS WWW stack testing Permit 79-17. FGPROJECT that includes: EU5000CFMFLARE, EUACTIVECOLL-S2, EUENCLOSEDFLARE1-S2, EUENCLOSEDFLARE2-S2. Only EU5000CFMFLARE was tested under methods for Open Flares. H2S protocols for weekly and semi-annual canister/bag sampling were previously received/approved. November 2018 start up of new 5000CFM flare. Test results show Compliance with parameters for Open Flares under NSPS. (Separate entry for Canister sampling report H2S/TRS same date). Average flow 4,778 scfm during testing. Methane content average 35.75% (NOTE: Enclosed flares proposed refurbishment & re-testing has not happened to date)

Activity Date	Activity Type	Compliance Status	Comments
05/17/2019	Stack Test	Compliance	Results of CANISTER LFG sampling per Permit 79-17. FGPROJECT that includes:EU5000CFMFLARE, EUACTIVECOLL-S2, EUENCLOSEDFLARE1-S2, EUENCLOSEDFLARE2-S2. Only EU5000CFMFLARE was tested under methods for Open Flares. H2S protocols for weekly and semi-annual canister/bag sampling were previously received/approved. November 2018 start up of new 5000CFM flare. (Separate entry for NSPS stack test results show Compliance with parameters for Open Flares). Canister sampling report same date as stack test. Results show compliance with 408 ppm limit: H2S 344 and 335 ppm. TRS 359 and 350 ppm.
05/15/2019	MAERS	Compliance	MAERS ROP CERT. ROP Major Cat 1 Landfill and gas to energy plant. Two enclosed flares, one Utility flare 5000 cfm, one Temp Flare 3000 cfm (now removed). Plant = 4 Turbines and 3 ductburners. LF fugitives and Truck particulate fugitives calculated. Support docs received or attached. AQD corrected two EU names to clarify/correct spelling. AQD added NSPS cks to EU.
05/15/2019	MAERS	Compliance	MAERS Cert. ROP Major Cat 1 Landfill and gas to energy plant. Two enclosed flares, one Utility flare 5000 cfm, one Temp Flare 3000 cfm (now removed). Plant = 4 Turbines and 3 ductburners. LF fugitives and Truck particulate fugitives calculated. Support docs received or attached. AQD corrected two EU names to clarify/correct spelling. AQD added NSPS cks to EU.
05/10/2019	Other Non ROP	Compliance	Receipt of April 2019 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)

Activity Date	Activity Type	Compliance Status	Comments
05/03/2019	Other Non ROP	Compliance	1st Quarter 2019 Compliance report ADS Quarterly Reporting Requirement - Consent Order (EPA ACO). Fwd to MMD. Attachments: Monthly gas well monitoring, Gas liquid level, gas control device, Perimeter Probe monitoring, Gas Extraction Analysis.
05/03/2019	Telephone Notes		Email and follow up telephone call. AQD requested update on Blowers and Flares. ADS reply that all blowers are final installed and shut down plant on May 1st to test operation of them & all three flares. Test was successful at McGill 2850 scfm; Zink 2480 scfm; Candlestick (new) 4300 scfm. Two rebuilt blowers are on-site for back-up. Still pending is finish refurbishing Enclosed flares - proposed for summer and then will need to be re-tested. AQD shared this information with Material Mgmt Division and Enf. staff. Emails in file.
04/25/2019	Self Initiated Inspection	Non Compliance	Site visit of Fortistar to investigate an issue with Turbine 4 and discrepancy in power rating. Also site visit at the landfill to continue on-going investigation/observation of ETLF event. Enforcement Confidential.
04/12/2019	Self Initiated Inspection	Non Compliance	Deployed Flir E8 Infrared camera to check for hotspots at landfill. Enforcement Confidential.
04/10/2019	Other Non ROP	Compliance	Receipt of March 2019 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)

Activity Date	Activity Type	Compliance Status	Comments
04/09/2019	NSPS (Part 60)	Compliance	2018 ROP 2nd Semi-annual NSPS Subpart WWW Report. 3 Deviations reported. 11 Wells not monitored in July. Usual Wellhead exceedances and deviations. Flare flows not recorded/not operating @12 days when installed new header piping. Temp Flare >15 min not record presence of flame/ not operating. New Flare lost power 12/12 flame not recorded/not operating. All controls not operated 1x >1hr on 11/15 due to construction in flare yard. SEM Qrtly no deviations: 3rd 8 exceedances cleared; 4th 23 exceedances cleared. 9 well redrills & 8 new wells (7/13 - 9/11).
04/08/2019	ROP Other	Compliance	2018 2nd Semi-annual Start-Up, Shutdown, and Malfunction Report (SSM). Report 0 Malfunctions. Start up, shut down events kept on file and available; not included. Report states they followed plan/no revisions.
04/08/2019	ROP Other	Compliance	2018 2nd Semi Annual Startup, Shutdown, and Malfunction Report (SSM). Advanced Disposal Services S1 & S2. Report 179 start-up, 166 shutdowns, and 5 malfunctions. Table provided. Open flare August, continuous monitor syst. malfunction (UV scanner).
04/08/2019	ROP Annual Cert	Compliance	2018 ROP Annual Certification & Deviation Report. Advanced Disposal Services (ADS) S1 and S2. Report 2 deviations 1st Semi and 3 deviations 2nd Semi for total 5. Deviations include: Wells not monitored & deviations; flare flows not recorded/flare not operating; Temp flare pilot flame out/not operating; 5000cfm flare lost power 1 day.
04/08/2019	ROP SEMI 2 CERT	Compliance	2018 ROP 2nd semi-annual Certification & Deviation Report. Advanced Disposal Services (ADS) S1 and S2. Report 3 deviations. Deviations include: 11 Wells not monitored July; normal well deviations O2, press, temp.; flare temp/flows not recorded/flare not operating.

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04/08/2019	ROP Annual Cert	Compliance	2018 Annual ROP Certif & Deviation Report. Fortistar S3. Reported 2 deviations each for both periods = 4 total. Mass SO2 exceedances EGTs1-3 plus DBs. Testing Failures (EGTs only): May/June (w/wellfield conditions nonrepresentative) and October 2018.
04/08/2019	ROP SEMI 2 CERT	Compliance	2018 2nd Semi-annual ROP Cert & Deviat Report. FORTISTAR S3. Report 2 deviations, Mass SO2 exceedances all EGTs & DBs and October Testing failure (EGTs only).
04/02/2019	Stack Test Observation		EU5000CFM Flare performance testing. Permit and NSPS WWW required. AQSI Tester. TPU assigned Tom Gasloli. Both he and I observed testing.
04/02/2019	Odor Evaluation		Conducted an odor evaluation in the downwind area and perimeter roads of the AHLF property prior to attending performance testing of EU5000CFM Flare. Wind was out of the south.
04/02/2019	Self Initiated Inspection	Non Compliance	Elevated Temperature Landfill (ETLF) Event. Report based on email. Enforcement Confidential.
03/28/2019	Meeting Notes		Meeting with ADS per their request. Held at AHLF followed by landfill tour. See notes entered here from Mike K.. DKV following the mtg. observed dry rotary brush sweeper generate excess dust from entrance across Napier Road. Called contact Anthony Testa and he said he'd address immediately/agreed new sweeper should be used. Also, then conducted odor observation on 6 Mile & Ridge wood School in response to several complaints earlier (AM). No odors detected 1:00 to 1:30 PM offsite.
03/24/2019	Odor Evaluation		Conducted odor observation in the area downwind of the facility due to ongoing odor complaints received.

Activity Date	Activity Type	Compliance Status	Comments
03/22/2019	Stack Test	Compliance	Permit 79-17. AQD requested weekly sampling data for FGPROJECT that includes:EU5000CFMFLARE, EUACTIVECOLL-S2, EUENCLOSEDFLARE1-S2, EUENCLOSEDFLARE2-S2. H2S protocols for weekly and semi-annual canister/bag sampling were previously received/approved. November 2018 start up of new 5000CFM flare. ADS submittal includes draeger tube sampling for January 4th to March 12th. Range 40 ppm to 150 ppm H2S.
03/07/2019	Other Non ROP	Compliance	LF Surface Odor Monitoring AHLF bi-monthly - RKA prepared /conducted site-wide Odor monitoring using Scentometer Dec 18-19. Identified odor hits (<2). The odor areas & Identification & Repair Log are attached. Most hits were gas venting soil cover leaks; correction is to place soil. Report in File.
03/05/2019	Odor Evaluation		Conducted odor observation in the area downwind of the facility due to ongoing odor complaints received.
02/27/2019	Telephone Notes		Tx'd to Anthony about recent request to decommission 5 TCH wells & remove temp tarp cover on north bowl area for active filling. AQD issued conditional approval. AT confirmed remove/fill as they go, so active fill area and not removing all of it at once. Also, that all area wells will be checked and brought into compliance. Told him 7 day notice by email acceptable and surface scan downwind around area or on Saturday after close acceptable. Active face can't have people scanning. After close = darkness is issue. Well construction waiting 45 day notice Asbestos requirement. Can do laterals other types of construction now. Bob Walls retired; new GM Mark Johnson started 2/25.
02/06/2019	Other Non ROP	Compliance	Receipt of January 2019 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)

Activity Date	Activity Type	Compliance Status	Comments
02/06/2019	Other Non ROP	Compliance	4th Quarter 2018 Compliance report ADS Quarterly Reporting Requirement - Consent Order (EPA ACO). Fwd to WMRPD. Attachments: Monthly gas well monitoring, Gas liquid level, gas control device, Perimeter Probe monitoring, Gas Extraction Analysis.
01/29/2019	Scheduled Inspection	Non Compliance	Comprehensive inspection of the landfill conducted on January 18, January 23 and January 29, 2019.
01/15/2019	Telephone Notes		Contacted AQD to discuss Open Flare (Candlestick) 5000 scfm, start up date. It was installed in August 2018 and tested in September 2018. Its control system was installed in October 2018. It officially started operation on November 16. Therefore testing is required by permit within 180 days or @ May 16, 2019. AQD requested documentation w/records for November & December. Rec'd by email from AT on this date.
01/09/2019	Other		Follow up from ADS related to an issue identified by AQD while onsite at Fortistar on Tuesday 1/8 (See MK MACES Self Initiated Inspection Report). AT email 1/9: "Currently we are unable to operate the candlestick flare due to high liquid level in the knockout pot (KOP). We are still completing the installation of the sump behind the gas plant that will accept the liquid from the KOP. Until the sump installation is complete, we will have to manually drain the KOP which we will do tomorrow morning. The current status of the northwest flare is 3000 scfm, and plant consumption is about 7300 scfm. Currently the vacuum is 54".
01/09/2019	Other Non ROP	Compliance	Receipt of December 2018 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)

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01/08/2019	Scheduled Inspection	Non Compliance	Inspection of Fortistar. Several new compliance issues such as diesel being used as a fuel for 3 of the turbines, 3 by-pass stacks associated with the same turbines, and 4 by-pass stacks associated with the landfill gas treatment system that are not controlled.
01/05/2019	Complaint Investigation		Conducted odor observation in response to complaints. Observed Fugitive Dust from on site haul road, site entrance and track out onto Napier Road.
01/04/2019	Complaint Investigation		Conducted odor observation in response to large number of complaints received today.
01/04/2019	Malfunction Abatement Plan	Compliance	Advanced Disposal - Arbor Hills Landfill Malfunction Abatement Plan for Facility Flares
12/31/2018	Other		Document resolution of numerous December 2018 complaints received. Ongoing complaint situation; multi-media AQD & WMRPD. Conduct regular, periodic inspections, complaint investigations and odor observations. Company under EPA enforcement; DEQ VNs; and compliance plan proposals submitted.



Activity Date	Activity Type	Compliance Status	Comments
12/20/2018	Other		<p>Email correspondence w/ADS contact regarding blower issue. AT clarified the following: "...we have installed four blowers in the building and replaced the one removed for shipment back to the blower manufacturer with one of the blowers removed during this work. The modifications made in the blower building involve the installation of three new 4,000 SCFM blowers and one new 2,000 SCFM blower. The arrangement is intended to provide flexibility in the event there is any reduction in the volume of landfill gas being managed at the Fortistar facility. This also provides redundancy in that if one 4,000 SCFM blower required repairs, we have a minimum of 10,000 SCFM of blower capacity at all times in the blower building.</p> <p>We are completing the installation of the old blower in the slot where the blower was removed and returned to the blower manufacturer. With that old blower being installed in that slot there will be 4 blowers operational in the building at the flare compound. We estimate that each is capable of an output of 1,700 SCFM when operating at the reduced amperage to avoid a shutdown. We cannot exceed the volumes of the impacted blowers without the possibility of tripping them off. We can run any combination of blowers up to all four to make up for any reduced capacity at the plant. The maximum output at this time is estimated to be 6,800 SCFM (4 blowers x 1,700 SCFM). The NW Temporary flare can be operated up to 3,000 SCFM. In the event of a total plant shutdown the full blower capacity until we can resolve this issue is 9,800 SCFM. This is greater than the amount of landfill gas currently being managed in the system."</p>

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12/19/2018	Self Initiated Inspection	Compliance	Conducted on site inspection to accompany Darina Demirev, RK& Associates while they were conducting the bi-monthly scentometer landfill survey. Mike Kovalchick, AQD was also present. SEE MACES Report 12/19 Mike K. for details of observations. A follow up letter was sent to ADS with identified 7 concerns dated 1/2/19; ADS reply was rec'd 1/16/19 w/proposed resolutions. See documents in plant files.
12/19/2018	Odor Evaluation		Accompanied RK & Associates on odor evaluation of south and southeast side of landfill. Diane Kavanaugh Vetort also part of evaluation
12/17/2018	Other		Email notice from ADS to AQD regarding new 5000 CFM Flare: "When we were in the process of commissioning the control system and we tried to bring the 4,000 SCFM blowers online, the blowers would over-amp. They simply could not run and supply the required flow to the system. On December 6, 2018, the company that constructed the blowers (Lonestar), had a technician come on-site to see if he could diagnose the problem. The Lonestar technician could not determine why the blowers were over-amping and his initial thought was that the motors were under-sized. The Lonestar engineers went back and re-calculated their numbers to see if that truly was the issue and they deemed that the way the blowers were designed should be sufficient for our needs. On December 13, 2018, Lonestar requested that we send back one of the blowers so that can take a closer look at the blower and the motor separately to assure there is not an issue. ADS is currently waiting to hear back from Lonestar regarding a diagnosis. With that, ADS' Temporary flare permit is good through December 31, 2018. What do we need to do to extend the permit for the temp flare another 6-months?"

Activity Date	Activity Type	Compliance Status	Comments
12/11/2018	Stack Test	Compliance	TEST Protocol FGPROJECT weekly, monthly H2S landfill gas sampling. Draeger Tube. Flare Compound, PTI 79-17. TPU assigned Tom Gasloli
12/11/2018	Stack Test	Compliance	TEST Protocol FGPROJECT semi-annual TRS sampling and laboratory analysis. Landfill gas to flare compound. PTI 79-17. TPU assigned Tom Gasloli
12/11/2018	Stack Test	Compliance	TEST Protocol EU5000CFMFLARE compliance testing landfill gas 40 CFR 60 Subpart WWW and PTI 79-17. AQSI Test Company/consultant. TPU assigned Tom Gasloli. Scheduled for 1/17/19
12/10/2018	Other Non ROP	Compliance	Receipt of November 2018 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)
12/08/2018	Other		At 6:27 AM I received email correspondence from AT, ADS notifying AQD and WMRPD of forced Landfill Gas Plant shutdown (Fortistar). Plant was forced into an outage at 3:00AM, Saturday 12/8. Stated during shutdown ADS will run candlestick flare and the temporary flare. "I just received word that the plant is able to come back and won't be back to full capacity until approximately 9 or 10 AM. Odors may be present during this time." At 11:29 AM Email from AT, ADS stated, "The plant is now back up and has achieved the vacuum set point (70")."
12/07/2018	Odor Evaluation		Conducted odor observation in area of AHLF and surrounding community. Accompanied by Stephanie Weems, new AQD Jackson District EQA.
12/05/2018	Odor Evaluation		Odor Evaluation conducted by staff of the Detroit Office to assist Jackson District Office.

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12/05/2018	Complaint Investigation		Conducted odor observation as a result of high number of complaints received 12/4 and 12/5. Email sent to CMS Energy Northville Compressor Station to verify no odor causing activities occurred due to large number of complaint descriptions of gas, rotten eggs, natural gas like. WMRPD contacted ADS directly (corresponding emails attached to this report to file).
11/30/2018	Other		Documents resolution of numerous November 2018 complaints received. Ongoing complaint situation; multi-media AQD & WMRPD. Conduct regular, periodic inspections, complaint investigations and odor observations. Company under EPA enforcement; DEQ VNs; and compliance plan proposals submitted.
11/29/2018	Other Non ROP	Compliance	LF Surface Odor Monitoring AHLF - RKA prepared /conducted site-wide Odor monitoring using Scentometer Oct 5-6. Identified 5 odor hits (<2). The odor areas & Identification & Repair Log are attached. Most hits were gas venting soil cover leaks; correction is to place soil. Report in File.
11/29/2018	Other Non ROP	Compliance	Note could not locate having received this report; requested resend. LF Surface Odor Monitoring AHLF - RKA prepared /conducted site-wide Odor monitoring using Scentometer July 26-27. Identified 9 odor hits (<2). The odor areas & Identification & Repair Log are attached. Most hits were gas venting soil cover leaks; correction is to vacuum 9/4. Report in File.

Activity Date	Activity Type	Compliance Status	Comments
11/21/2018	Stack Test	Non Compliance	<p>FORTISTAR Test Results Report (re-test) received stating compliance except for the known SO2 non-compliance is continuing. SO2 non compliant for all Turbines. FGTURBINES-S3 (EGT Typhoon), FGDUCTBURNERS-S3, EUTURBINE4-S3 (Solar Taurus). AQD requested re-test be the same set of parameters/Units as this prior Testing (See May29-June 1, 2018). AQD letter 9/6. 9/21 rec'd Fortistar letter. PTI application in-house to increase SO2 limit. TPU assigned Tom Gasloli; he and DKV observed testing. Daily Draeger Tubes &amp; two days Canisters were taken during testing. TPU Memo rec'd 12/3/18 = acceptable. NOx close to limit on T3. H2S mostly well under 408 ppm proposed in application.</p>
11/21/2018	Odor Evaluation		<p>Conducted odor observation in the area surrounding the AHLF this morning about 8:00 AM to 9:00 AM.</p>
11/20/2018	Telephone Notes		<p>Anthony &amp; Joe Kohn telephoned me regarding email sent on 11/20. ADS contacted me to discuss email I sent requesting information.</p>
11/19/2018	Telephone Notes		<p>Telephone call from Anthony Testa, ADS notifying AQD &amp; WMRPD of Turbine shutdown on Sunday and start up of Temporary Flare. Acknowledge large number of complaints received. During conversation with Anthony I was also made aware that the Flare compound/blower have been down to complete construction. November 6 was provided as the date. AQD requested Plant operations data since that time and schedule of actual shutdown and work. Email rec'd after hours on 11/19 did not contain all requested information. AQD sent email 11/20 stating this and that additional actions should/could have been taken to address fugitive landfill gas emissions. (See entry 11/20 for follow up call and email)</p>

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11/18/2018	Odor Evaluation		Due to large number of complaints over past several days and today, conducted odor observation in the area.
11/09/2018	Other Non ROP	Compliance	Receipt of October 2018 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)
11/08/2018	Complaint Investigation	Compliance	Started out as odor investigation but changed to dust observation and facility tour.
10/31/2018	Other		Documents resolution of numerous October 2018 complaints received. Ongoing complaint situation; multi-media AQD & WMRPD. Conduct regular, periodic inspections, complaint investigations and odor observations. Company under EPA enforcement; DEQ VNs; and compliance plan proposals submitted.
10/29/2018	ROP Semi 1 Cert	Compliance	1st Semi-annual Certification & Deviation Report. Section 3. Fortistar reports ongoing SO2 violations; and failed testing - due to non-representative well field conditions. Fortistar case is with EPA and also have PTI revision application under review w/AQD.
10/29/2018	ROP Other	Compliance	Start-Up, Shutdown, and Malfunction Report (SSM). Section 3 Fortistar reports no malfunctions and normal routine SS occurred during the period. Control devices downtime dates/times are being reported Quarterly under required AHLF EPA ACO report. 1st Q 3/19 128 hrs DTE forced outage; 4/15 @ 9 hrs tripped by DTE; 6/7 11 hrs DTE outage; 6/19 5.5 hrs LF tie-in piping installation.
10/29/2018	Other Non ROP	Compliance	ADS Quarterly Reporting Requirement - Consent Order (EPA ACO). 3rd Q 2018 received, complete. Fwd to WMRPD. Attachments: Monthly gas well monitoring, Gas liquid level, gas control device, Perimeter Probe monitoring, Gas Extraction Analysis.

Activity Date	Activity Type	Compliance Status	Comments
10/25/2018	NSPS (Part 60)	Compliance	3rd Quarter SEM, submitted now per AQD request. Eight exceedances reported 9/11-12 that all cleared by 1st 10 Day, and on 30 Day remonitoring. Three groupings of sites, 4 on top of northend bowl/tarp Cell 5, two on seam Cell 5 West & East, two southend Cell 5 near seam West & East.
10/23/2018	Telephone Notes		Follow up call with Anthony regarding offsite landfill gas odor from new Cell 4E construction. He called both Larry Bean and I yesterday and sent an email (copied to this report). Placed soil on area yesterday, believe addressed issue for now. Barr Eng (conducts RKA odor surveys) found no odor last night or this morning surveys.
10/23/2018	Other		AQD received email stating landfill gas odors from existing blower housing and delay of its upgrade, previously identified in EPA ACO Compliance plan and AQD communications with ADS representatives to be completed end of October 2018. Proposed date is now end of November 2018.
10/23/2018	Telephone Notes		AQD called area resident Tracey Birkenhauer to obtain additional information regarding the Citizen's Odor complaint reporting system.
10/22/2018	Other		Larry Bean talked to Anthony. The Fortistar Plant shut down has been delayed by DTE due to the storms this weekend. The crews are out dealing with power outages in the communities. The scheduled outage for the gas plant may be November 6 and 7.
10/19/2018	Complaint Investigation		Numerous odor complaints received this week. Conducted odor evaluation in area and onsite with ADS contact.
10/19/2018	Stack Test Observation		In area conducting complaint inspection at AHLF so stopped at AHE to check in on final day of testing. Informed me issue identified by Derenzo and AHE requiring AQD TPU and District decision.

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10/17/2018	Stack Test Observation		Observed Day 2 of testing planned for 10/15 week of EGT 1-3 and Solar 4 permit and consent order required testing. Derenzo, Tester /Consultant. Tom Gaslioli, TPU assigned.
10/17/2018	Odor Evaluation		Conducted area odor evaluation prior to Stack test observation at Fortistar, AHE Plant. Conducted self initiated on-site review with Anthony Testa during ongoing testing to observe landfill odors and wellfield operation in a specific area.
10/16/2018	Stack Test Observation		Observed Day 1 of required performance testing (re-testing) at Fortistar, Arbor Hills Energy plant. Four landfill gas turbines with ductburners undergoing full compliance testing this week.  Also conducted brief odor evaluations in surrounding area prior to and after test observation.
10/16/2018	Odor Evaluation		Odor observation conducted in the area surrounding facility prior to and following stack test observation at Fortistar gas to energy plant today.
10/10/2018	Odor Evaluation		Brief odor observation conducted on perimeter roads mainly, due to Winds out of the South.
10/09/2018	Other		Document resolution of multiple ongoing periodic odor complaints at AHLF.
10/09/2018	Other		Document to resolve numerous complaints with one report entry. Ongoing complaint situation with periodic odor observations, meeting and Odor Survey ride-along audits.
10/09/2018	Stack Test	Compliance	Performance Test Plan for Enclosed Flare EUENCLOSEDFLARE-S2 for NOx, CO, NMOC. Scheduled for week of 12-10-18. Refurbished Flare required PTI 79-17 related testing at permitted capacity of 4600 SCFM. AQS Consultant/Testers. Prior test 6/2016 capacity 3700 SCFM.



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10/04/2018	Other Non ROP	Compliance	Receipt of September 2018 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)
09/28/2018	Odor Evaluation		Conducted odor observations this morning in the area surrounding facility and neighborhoods to the east. Ongoing odor complaint situation. Odor complaints were received during entire week of 9/21 -9/29 including this morning.
09/20/2018	Other		District Supr. Scott Miller email to ADS contact Bill Tennant regarding Fortistar reference to # Wells currently at AHLF. Bill reply: Our database currently shows 494 active IDs in it. This number would include vertical wells, Horizontal collectors, leachate clean out risers attached to the system, passive vents, probes, and sample port locations. My last recollection of vertical wells in the 340 range. I don't have a breakdown readily available by type but could figure it out if you need specific information. If you subtract out sample ports and migration probes. 469 would be fairly close to all other gas collection devices.
09/14/2018	Telephone Notes		Called Bill to discuss SEM hits in the 1st Semi-annual ROP Certification/Deviation Report. Seven total and both Quarters (1 & 2) had 3 hits with >500 ppm surface methane. Had to expand the Wellfield to address. Various ongoing construction but the did add Wells and did find cause of two exceedances (2nd Q) were due to watered in header. Corrective action taken. Report does not require details but in this case DKV informed Bill we do need to verify/be aware that corrective actions did/do occur and where Wellfield expansions are done. Bill said just did 3rd Q partial report to him. He'll let me know how many hits and what actions taken - by email likely.
09/14/2018	Odor Evaluation	Compliance	Odor survey.

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09/14/2018	ROP Semi 1 Cert	Compliance	1st Semi-annual ROP Cert/Dev report. ADS (Section 1 &2). Report EUACTIVECOLL-S2 deviation due to discovery of 25 Wells having been shutoff by Fortistar S3 (and/or consultant) w/o notice to ADS. Other monthly monitoring suggests Wells operating properly; no report of reason to have been shut off. (Also reported to AQD at the time under R912). Report EUENCLOSEDFLARE V1.2 one deviation of recordkeeping/temperature & gas flow data missing. Acceptable.
09/13/2018	NSPS (Part 60)	Compliance	ADS Section 1 & 2 ROP 1st Semi NSPS Report. SEM exceedances at 7 locations. All were addressed by immediate actions (cover repair, etc) and overall by Expanding the Wellfield in the specific areas. DKV tx'd to Bill Tennant today to discuss. Next SEM event Sept.=he will send me detail on corrective actions for any exceedances. Expanded: 7 Wells installed in June. HOVs were requested/approved during the period. 3 instances Enclosed flares temps not recorded for > 15 min. No periods w/control > 1hr or 5 days. Acceptable.
09/13/2018	ROP Other	Compliance	ADS Section 1 & 2: 1st Semi Cert/Deviation, Startup, Shutdown, and Malfunction Report. EUENCLOSEDFLARES 167 start-up and 166 shut-down events. 1 Malfunction Event 17 hrs on 4/10(Utility Flare). All consistent with plan. Acceptable.

Activity Date	Activity Type	Compliance Status	Comments
09/12/2018	Meeting Notes		<p>ADS requested meeting with AQD and WMRPD District Supervisors. Meeting to discuss recent VN R901 and R433, general odors and complaints, specific proposal/protocol from ADS, submit in 30 days, related to Waste &amp; Compost operations plans and complaint response/determination/handling. ADS presented idea related to scentometer &amp; use to respond to complaints, determine odor characteristics &amp; complaint validity and take corrective actions as appropriate. ADS wants to submit in a written proposal how they'll handle waste related operations &amp; how they'd propose to evaluate, respond to, document odor, determine if a R901/433 and corrective actions. AQD will entertain their submittal. AQD communicated we cannot change Rules and procedure/guidelines statewide on complaint investigations/ R901 determination for their proposal to use the scentometer device. This would take significant amount of time for negotiations, evaluations, legislative action, etc...</p>
09/11/2018	Other Non ROP	Compliance	<p>Receipt of August 2018 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)</p>
09/11/2018	NSPS (Part 60)	Compliance	<p>2nd Quarter SEM, submitted now per AQD request. Two exceedances reported 6/12 that continued through 2nd 10 day monitoring. 30 Day remonitoring should occur in 3rd Quarter (July). Both sites were not far from each other on the north/east quadrant of the hill and up the higher slope (north of East landfill area but not quite to active site on top. #1 3265/2100/1395, #2 3100/3100/1411. Contacted Bill Tennant (see update under ROP Semi1 NSPS)</p>

Activity Date	Activity Type	Compliance Status	Comments
09/04/2018	Telephone Notes	Non Compliance	Contacted Suparna to inform her AQD issuing VN citing Testing, Consent Order, SO2 emissions. Also clarified Re-test of all Turbines tentatively scheduled for mid-Oct. must be a duplicate of prior testing (not just SO2 which failed). Initial test was determined to be "non-representative" due to 25 wells have been shut off during testing. Finally Sept 17th was accepted by District, Enf. & Permits as meeting date Fortistar requested mtg in Lansing and proposed date. AQD issued Test letter 9/6. VN dated 8/30.
08/31/2018	ROP Other	Compliance	Retest Notification - SOx Emissions. Fortistar failed initial required testing by June 1, 2018 due to non-representative operation. Retest proposed for October 2018.
08/23/2018	Odor Evaluation	Non Compliance	Odor Evaluation
08/23/2018	Odor Evaluation	Non Compliance	Conducted a brief odor observation in area surrounding facility due to ongoing complaint situation. Observation was done in the morning prior to a scheduled meeting and inspection at the AHLF.
08/23/2018	Self Initiated Inspection	Non Compliance	Scheduled meeting and inspection of progress of ongoing construction upgrades to gas collection and control system. Also to observe and discuss waste and compost operations and any improvements.
08/20/2018	Complaint Investigation		Place holder in MACES to resolve multiple complaints with one entry due to ongoing odor complaint situation and investigations. AQD, WMRPD continues to monitor, inspect and conduct odor observations at/around facility. AHLF has committed to several compliance programs (incl w/EPA) and continues to install upgrades to GCCS & New Flare at this time. During early August, 36" header pipe became active resulted in large increase in vacuum & scfm to plant & existing flares. AQD Steve Weiss audit/rode w/RKA on odor survey on 8/8.

Activity Date	Activity Type	Compliance Status	Comments
08/16/2018	Telephone Notes		<p>Received call from AT and Bob Walls. Several items were discussed. Stated talked w/ Larry Bean, WMRPD DS. Talked about "Best Practices Memo" (operations plan), Waste &amp; Compost expert reports and operations plans. Nothing specific except to say they implemented installation of a berm at the compost site as was recommended. Mentioned Todd Whittle, Regional Supervisor would like to meet w/ Larry and Scott in September. AT/BW said they responded to a complaint yesterday and didn't verify &amp; said the complainant told them "they'll keep complaining until they shut down." Discussed some concerns w/Community's email complaint form reporting system. We have discussed issues in the past and there are some we agree on. ADS confirmed for the most part they are logging all of them -unless duplicate/persons from same home at same time. AT/BW had a call from Bob Nix come in same time on phone w/me. Said likely about daily # of complaints logged on RK Wkly odor forms. He recently contacted RK &amp; AQD saying numbers don't match what Twp. has. Contaminated DTE soils - BW said less odorous then initially, burying in active face, only one load in last week.</p>
08/09/2018	Telephone Notes		<p>Received voice message at @ 9:30 AM notifying me that ADS is shutting down the plant (LFG control) this morning to complete a tie in to the plant. The NW Temporary Flare will be run at maximum capacity during this time. Anticipate completion of the job by 12 noon today.</p>
08/08/2018	Odor Evaluation		Odor survey.

Activity Date	Activity Type	Compliance Status	Comments
08/08/2018	Other Non ROP	Compliance	ADS Quarterly Reporting Requirement - Consent Order (EPA ACO). 2nd Q 2018 Received, complete. Fwd to WMRPD. Six attachments: Monthly gas well monitoring, Gas liquid level, gas control device, Construction docs., Perimeter Probe monitoring, Gas Extraction Analysis. AQD requested some clarification; phone call w/ Bill Tennant/add'l information rec'd 8/17 acceptable.
08/07/2018	Other Non ROP	Compliance	Receipt of July 2018 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)
08/06/2018	Stack Test	Compliance	Received Utility Flare EUOPENFLARE_TEMP Sulfur Concentration Test Results, PTI 19-17A. H2S grab sampling monthly. 2ND Month = compliant August 2, 2018 at: 400 ppm H2S.
08/03/2018	Complaint Investigation		Ongoing odor complaint situation and investigation. AQD and WMRPD continues to monitor, inspect and conduct odor observations at/around facility. AHLF has committed to several compliance programs and continues to install upgrades to GCCS and New Flare at this time. This is place holder in MACES to resolve multiple complaints with one entry.
08/01/2018	Stack Test	Non Compliance	FORTISTAR Test Results Rept. received stating non-representative test and stated will retest. 25 Wells shut off during testing acknowledged. Also SO2 non compliant for all Turbines. FGTURBINES-S3 (EGT Typhoon), FGDUCTBURNERS-S3, EUTURBINE4-S3 (Solar Taurus). AQD requested re-test be the same set of parameters/Units as this prior Testing (See May29-June 1, 2018). AQD letter 9/6. 9/21 rec'd Fortistar letter notifying AQD required tests will be conducted 10/15-19. REPORT FILED/NOT REVIEWED NOT ACCEPTABLE TEST.

Activity Date	Activity Type	Compliance Status	Comments
07/30/2018	Other		<p>Email from ADS Bill Tennant notifying DEQ (and others) of construction update and associated LFG to Energy Plant /Flare shut-downs. Bill wrote: We are going to have two system shutdowns at Arbor Hills Landfill for construction and header tie ins this week. The first tie in will be today at noon and will last until about 17:00. The next tie in will be tomorrow morning at 08:00 and will last until about 14:00.</p> <p>The plant and main flares will be down during these tie ins. The North temp flare will be increased to maximum flow. There may be some odors related to these system shutdowns. We are putting alerts on our website as well.</p> <p>On Wednesday at 08:00 we are going to test the new header and anticipate having full vacuum restored to the north half of the landfill! This will allow us to put the temp flare in standby mode and send all the gas to the plant.</p>
07/26/2018	Odor Evaluation		Odor observation conducted this morning due to recent complaints received. In area @8:40 AM to 9:55 AM.
07/23/2018	Other Non ROP	Compliance	LF Surface Odor Monitoring AHLF - RKA prepared /conducted site-wide Odor monitoring using Scentometer May 17-18. Identified 18 odor hits (<2). The odor areas & Identification & Repair Log are attached. Most hits were gas venting soil cover leaks; correction is to install new Wells June. 1 Well boot leak and 2 Leachate spills. Report in File.
07/16/2018	Odor Evaluation		Conducted odor observation this morning due to recent complaints received. In area @8:30 AM to 10:00 AM.
07/10/2018	Other Non ROP	Compliance	Receipt of June 2018 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)

Activity Date	Activity Type	Compliance Status	Comments
07/09/2018	Stack Test	Compliance	Received Utility Flare EUOPENFLARE_TEMP Sulfur Concentration Test Results, PTI 19-17A. H2S grab sampling monthly. Returned to this following many months of weekly sampling due to noncompliance. 1st Month returned to being compliant is July 2018 at: 400 ppm H2S.
07/09/2018	Odor Evaluation		Conducted odor evaluation in area surrounding facility. Ongoing odor complaint situation.
06/26/2018	Stack Test	Compliance	Utility Flare EUOPENFLARE_TEMP Sulfur Concentration Test Results, Tedlar bag sampling required semi-annually. PTI 19-17A. 1st test 6/6/17, Second test 12/6/17, and this is the 3rd test 6/5/18. Results Sample 1 and 2 are the same, compliant at: 390 ppm Total Reduced Sulfur and 390 ppm H2S. AQD sent comments/Revision rec'd 7/9 acceptable report /results.
06/18/2018	Odor Evaluation		Odor survey.
06/15/2018	Other		Documents resolution of multiple ongoing periodic odor complaints at AHLF. WMRPD, Alex Whitlow conducted Division regular on-site inspection on 6/14/2018. No significant odors were observed.
06/14/2018	Stack Test	Compliance	23rd Weekly H2S grab sampling (@ 425 ppm= compliant #4) required by PTI 19 -17A due to exceedance of 440 ppm limit at Utility Flare 2nd Semi-annual stack testing/sampling & analysis. Limit revised PTI is now 500 ppm. ADS sending results weekly (stain tube photo). Also maintain H2S tracker (spreadsheet) of H2S results since Utility (Temporary) Flare commenced operation early 2017.
06/08/2018	Other		Documents resolution of various recent dates of odor complaints. Ongoing odor complaint situation involving AHLF and nearby subdivisions, residential areas. AQD & WMRPD conduct frequent inspections and odor evaluations. ADS is working on GCCS expansion & new Flare APC.



Activity Date	Activity Type	Compliance Status	Comments
06/07/2018	Telephone Notes		Received notice from Jay of wellfield issue identified last week during Fortistar Turbine performance testing, specifically 5/29 to 5/31. RKA patrol identified off site LFG odor; ADS trace back to LF, an area with significant LFG odor was identified West/North. Found 25 Wells shut off (valves completely closed, some positive pressure). Aptim apparently was told to "tune-down" high H2S Wells for testing period. ADS advised Fortistar to retest. Removed Aptim from LF and inserting own Tech & Gas Mgr. Bill Tennant. Detail Report to follow to DEQ 6/13. Attny notifying EPA.
06/06/2018	Odor Evaluation		Odor survey.
06/06/2018	Stack Test	Compliance	22nd Weekly H2S grab sampling (@ 450 ppm= compliant #3) required by PTI 19 -17A due to exceedance of 440 ppm limit at Utility Flare 2nd Semi-annual stack testing/sampling & analysis. Limit revised PTI is now 500 ppm. ADS sending results weekly (stain tube photo). Also maintain H2S tracker (spreadsheet) of H2S results since Utility (Temporary) Flare commenced operation early 2017.
06/06/2018	Other Non ROP	Compliance	Receipt of May 2018 Monthly Progress Report required by ACO issued May 4, 2017. Report sent to EPA with copy to AQD. (1st Report received was June 2017)
06/01/2018	Stack Test Observation		(Last day) FORTISTAR Section 3 Gas to Energy Plant conducted performance testing of all Turbines from 5/29 through 6/2. Testing required by ROP and Consent Order. Derenzo is Testing firm. Tom Gasloli, TPU assigned & observed on Day 1 5/29. DKV observed 5/30 and 6/1.
06/01/2018	Odor Evaluation		Conducted brief odor evaluation prior to and after other business in the area.

Activity Date	Activity Type	Compliance Status	Comments
05/30/2018	Stack Test Observation		(Day 2) FORTISTAR Section 3 Gas to Energy Plant conducted performance testing of all Turbines from 5/29 through 6/2. Testing required by ROP and Consent Order. Derenzo is Testing firm. Tom Gasloli, TPU assigned & observed on Day 1 5/29. DKV observed this morning.
05/30/2018	Odor Evaluation		Conducted brief downwind odor observation in the area prior to conducting other business in the area.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Supervisor: \_\_\_\_\_