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March 12, 2020

Oregon Department of Environmental Quality  
AQ Permit Coordinator  
700 NE Multnomah Street, Ste 600  
Portland, Oregon 97232

**Re: Intel Corporation, Aloha and Ronler Acres Campuses, ACDP 34-2681-ST-01  
Calendar Year 2019 Annual Report**

In accordance with the requirements set forth in Oregon Department of Environmental Quality (ODEQ) Permit ACDP 34-2681-ST-01 Condition 77.b., Intel Corporation (Intel) is submitting three (3) copies of this annual report. During calendar year 2019, there was one deviation reported on February 21, 2019 related to an emergency generator maintenance and readiness (M&R) testing event that began on February 6, 2019 at 7:14am and lasted until 8:11am. Part of this M&R test occurred before sunrise (7:25am) and therefore was a deviation of permit condition 45.c.iv. There were no other instances of deviation from any permit requirements within the air permit #34-2681-ST-01 that need to be included in this report for 2019. This annual report is being submitted in a timely manner on or before March 15, 2020 and includes the following:

- 77.b.ii.: The emission fee report
- 77.b.iii.: A summary of the Excess Emissions and Upset log
- 77.b.iv.: The annual certification that the risk management plan is being properly implemented
- 77.b.v.: The type and amount of fuel combusted
- 77.b.vi.: The calculated 12-month rolling emission rates for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, CO, NO<sub>x</sub>, VOC, Fluorides, combined HAPs and individual HAPs

NOTES:

- Reporting for individual HAPs is only required for pollutants with emission rates of 0.1 or more tons/yr.
  - The GHG emissions report will be submitted no later than March 31 as per OAR 340, Division 215.
- 77.b/vii.: Revisions of the pollutant capture efficiency function used for compliance emission calculations in condition 60.
  - 77.b.viii.: A summary of the physical changes, additions and/or process modifications as well as the pollution prevention project(s) performed to offset emission increases associated with these changes/modifications, pre-approved pursuant to Condition 16. In addition, the permittee must identify and summarize any change(s) with the associated emission increase of five (5) or more tons of VOC or one (1) or more tons of any HAP on a yearly basis.
  - 77.b.ix.: Summary of complaints relating to air quality received by permittee during the year.
  - 77.b.x.: List major maintenance performed on pollution control equipment.

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77.b.xi.: There are no applicable Subpart Dc specific reporting requirements for affected facilities that are exclusively natural gas fired.

**77.b.ii.: Emission fee report:**

Attachment A to this annual report includes Form F1101 as the emission fee report.

**77.b.iii.: Summary of the Excess Emissions and Upset log:**

There were no excess emissions or upset events in calendar year 2019.

**77.b.iv.: Annual certification that the risk management plan (RMP) is being properly implemented:**

The Ronler Acres campus has an RMP that was last updated in September of 2018. The RMP is current and is implemented as required. The Aloha campus does not store regulated substances in quantities which exceed the RMP applicability threshold quantities, and therefore does not have an RMP.

**77.b.v.: The type and amount of fuel combusted:**

The Ronler Acres and Aloha campuses only combust natural gas and diesel fuel. The diesel fuel is fired within the emergency generators and fire pumps, while natural gas is fired in boilers, RCTOs, heaters, and Point of Use (POU) abatement devices. The quantity of these fuels combusted in 2019 are summarized below.

- Diesel Fuel Combusted
  - Aloha: 2,203 gallons
  - Ronler Acres: 46,372 gallons
  - Total: 48,575 gallons
- Natural Gas Combusted
  - Aloha: 160 MMscf
  - Ronler Acres: 1,235 MMscf
  - Total: 1,395 MMscf

**77.b.vi.: Calculated 12-month rolling emissions:**

Attachment B to this annual report includes the calculated 12-month rolling emission rates for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, CO, NO<sub>x</sub>, VOC, Fluorides, combined HAPs, and individual HAPs with annual emissions of 0.1 or more tons/yr. VOC emissions include both controlled and uncontrolled VOC emissions from the site.

**77.b.vii.: Revisions of the pollutant capture efficiency function used for compliance emission calculations in condition 60:**

No revisions were made to pollutant capture efficiencies used for compliance emission calculations in condition 60.

**77.b.viii.: Summary of physical changes pursuant to Condition 16:**

During calendar year 2019, there were no physical changes, additions and/or process modifications or associated pollution prevention projects performed to offset emission increases in accordance with Permit ACDP 34-2681-ST-01 Condition 16 regarding Operational Flexibility.

**77.b.ix.: Summary of complaints:**

During calendar year 2019, there was one formal complaint/inquiry via email on August 5<sup>th</sup>. The individual requested information about any Ronler Acres unusual emissions to the air the previous day (August 4<sup>th</sup>) when the individual observed flashing lights and heard loud alarms. Investigation of operations during the period in question did not show anything out of the ordinary. The alarms and flashing lights were likely due to an emergency preparation drill that occurred the evening of August 4<sup>th</sup>.

**77.b.x.: List of major maintenance performed on pollution control equipment:**

Attachment C to this annual report includes a list of major maintenance performed on the RCTOs and scrubbers at the Ronler Acres and Aloha campuses. All maintenance records (major and minor) are maintained onsite within the Maximo system and available for inspection upon request.

**77.b.xi.: NSPS Subpart Dc reporting requirements:**

Intel continues to fire natural gas exclusively in all boilers at the Ronler Acres and Aloha campuses. Therefore, there are no applicable Subpart Dc reporting requirements.

**Statement of Certification (as required by Permit Condition 74):**

*Based on information and belief formed after reasonable inquiry, the statements and information in this document and any attachments are true, accurate and complete. I also certify that all statements made concerning compliance, which are based on monitoring required by the permit but not required to be submitted to DEQ, are true, accurate and complete based on information and belief formed after reasonable inquiry.*

PENG BAI  
Name of designated responsible official

Corporate Vice President  
Title of responsible official

  
Signature of responsible official

March 4, 2020  
Date

Please contact me ([stephanie.b.shanley@intel.com](mailto:stephanie.b.shanley@intel.com); 503-319-6285) if you have any questions.

Sincerely,



Stephanie Shanley  
Environmental Manager  
INTEL CORPORATION

cc: Patty Jacobs, ODEQ  
Site Air Correspondence File

# Attachment A:

DEQ Form F1101



1. Reporting year: <b>2019</b>	
2. Facility name: Intel Corporation - Aloha & Ronler Acres	4. Permit number: <b>ACDP 34-2681-ST-01</b>
3. Aloha Campus, 3585 SW 198th Ave, Aloha, OR 97007 <hr/> Mailing street address or PO Box <hr/> Ronler Acres, 2501 NE Century Blvd, Hillsboro, OR 97124 <hr/> Mailing city, state and ZIP code	5. Stephanie Shanley, Environmental Manager <hr/> Contact name and title <b>(503) 319-6285</b> <hr/> Phone number with area code
6. Emissions (in tons) by regulated air pollutant subject to fees for the reporting year:	
PM <sub>10</sub> *	35
or PM	_____
or PM <sub>2.5</sub>	_____
or TSP	_____
SO <sub>2</sub>	39
NO <sub>x</sub> (as NO <sub>2</sub> )	197
VOC	178
* Report only one particulate category. If permit has a PSEL for PM <sub>10</sub> , report emissions of PM <sub>10</sub> . If permit has a PSEL for particulate matter (PM) and not PM <sub>10</sub> , report emissions of PM. If permit has a PSEL for PM <sub>2.5</sub> and not PM <sub>10</sub> or PM, report emissions of PM <sub>2.5</sub> . If permit has a PSEL for total suspended particulate (TSP) and not PM <sub>10</sub> , PM or PM <sub>2.5</sub> , report emissions of TSP.	
7. Total emissions (in tons) of pollutants subject to fees for the reporting year: <u>449</u>	
8. Statement of certification:	
I have reviewed this report and all supporting documentation in their entirety and to the best of my knowledge, information, and belief formed after reasonable inquiry, the statements and information contained herein are true, accurate and complete.	
<u>PENG BAI</u> Name of designated responsible official	<u>Corporate Vice President</u> Title of responsible official
 Signature of responsible official	<u>March 4, 2020</u> Date

# Attachment B:

Calendar Year 2019 12-Month Rolling Emission Inventory

Pollutant	Rolling 12-month Total Emissions (Ronier Acres and Aloha Facilities combined)												PSEL tons/year	Units
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19		
PM	26.2	26.1	26.0	26.7	26.5	26.3	26.3	26.6	26.5	25.5	26.4	26.3	41	
PM10	20.9	20.7	20.6	21.3	21.2	20.9	20.9	21.2	21.1	20.2	21.1	20.9	35	
PM2.5	16.6	16.4	16.3	17.0	16.9	16.6	16.6	16.9	16.8	15.9	16.8	16.6	31	
NOx	64.3	67.0	70.2	73.3	76.1	80.3	84.0	88.7	94.9	102.0	109.7	119.3	197	
CO	74.2	77.3	81.0	84.5	87.5	92.4	96.5	101.7	109.8	117.6	126.1	137.3	229	
SO2	5.5	5.4	5.3	5.2	5.0	4.9	4.7	4.5	4.4	4.3	4.1	3.9	39	
VOC	59.5	61.1	62.7	64.8	66.1	67.9	71.6	74.2	76.9	79.5	80.2	82.7	178	
Total Fluorides	3.6	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.2	4.3	4.4	4.5	6.4	
Total HAPs	8.4	8.5	8.6	8.8	9.0	9.4	9.4	9.6	9.9	9.9	10.3	10.4	24	
Individual HAP - HF	6.08	6.16	6.26	6.40	6.56	6.75	6.89	7.06	7.19	7.31	7.48	7.61	9	
Individual HAP - Cl2	1.71	1.78	1.71	1.73	1.78	1.94	1.88	1.91	1.97	1.90	2.03	2.03	9	
Individual HAP - HCl	0.04	0.10	0.13	0.17	0.20	0.24	0.28	0.29	0.33	0.36	0.40	0.43	9	
GHG	325,469	328,732	331,995	335,258	338,520	341,783	345,046	348,308	351,571	354,834	358,097	361,359	819,000	

Notes:

\* All individual HAPs with annual emissions above 0.1 tons per year are reported above

# Attachment C:

List of Major Maintenance on RCTOs and Scrubbers in  
Calendar Year 2019



Site	Asset	Work Order Description	Date
RA-D1X	D1X-VOC138-1-20	Technical PM Procedure See Document Management System for 1275MAX05RA	1/2/2019
RA-F20	F20-SC133-2-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM F20-SC133-2-111	1/3/2019
RA-D1C	RB1-SC133-6-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM RB1-SC133-6-111	1/4/2019
RA-D1D	RP1-SC133-1-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM RP1-SC133-1-100	1/6/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX06RA	1/9/2019
RA-D1C	D1C-VOC138-1-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	1/9/2019
RA-D1C	D1C-VOC138-2-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	1/9/2019
RA-D1C	D1C-VOC138-3-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	1/9/2019
RA-D1D	SC-133-4-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM SC-133-4-100	1/11/2019
RA-D1C	D1C-VOC138-3-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-3-120	1/13/2019
RA-D1X	D1X2A-SC133-3-00	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1X2A-SC133-3-00	1/18/2019
RA-D1X	D1X-VOC138-7-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-7-20	1/20/2019
RA-D1X	D1X2A-SC133-2-00	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM D1X2A-SC133-2-00	1/24/2019
RA-D1D	VOC138-4-120	VOC Abatement System (EXVO) (Sequenced) PM VOC138-4-120	1/26/2019
RA-D1X	D1X-VOC138-1-20	Technical PM Procedure See Document Management System for 1275MAX05RA	1/27/2019
RA-D1D	VOC138-4-120	(12:30-2:30 PM) Rebalance D1D VOC138-4-120 (see log)	1/30/2019
RA-D1X	D1X-SC133-5-00	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM D1X-SC133-5-00	2/3/2019
RA-D1X	D1X-SC133-5-00	Technical PM Procedure See Document Management System for 1271MAX07RA	2/3/2019
RA-D1C	D1C-SC133-3-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1C-SC133-3-100	2/4/2019
RA-D1C	D1C-SC133-1-200	(eRequest needed) Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1C-SC133-1-200	2/4/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX05RA	2/8/2019
RA-D1X	D1X-VOC138-6-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-6-20	2/9/2019
RA-F20	F20-SC133-3-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM F20-SC133-3-111	2/10/2019
RA-D1X	D1X-VOC138-1-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-1-20	2/11/2019
RA-D1X	D1X-VOC138-4-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-4-20	2/13/2019
RA-D1X	D1X-VOC138-5-20	Calibrate VOC138-5-20 Fresh Air Damper (see log)	2/15/2019
RA-D1X	D1X-VOC138-5-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-5-20	2/16/2019
RA-D1D	VOC-138-1-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-1-120	2/17/2019
RA-D1D	SC-133-1-200	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM SC-133-1-200	2/17/2019
RA-D1C	RB1-SC133-7-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM RB1-SC133-7-111	2/18/2019
RA-D1C	D1C-VOC138-2-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-2-120	2/20/2019
RA-D1C	RB1-SC133-8-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM RB1-SC133-8-111	2/24/2019

Site	Asset	Work Order Description	Date
RA-F20	D1B-VOC-138-3-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC-138-3-22	2/25/2019
RA-D1D	SC-133-5-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM SC-133-5-100	2/26/2019
RA-D1X	D1X-SC133-3-00	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1X-SC133-3-00	3/1/2019
RA-D1X	D1X-VOC138-2-20	SEAL GAP MEASUREMENT	3/2/2019
RA-D1D	RP1-SC133-2-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM RP1-SC133-2-100	3/3/2019
RA-F20	D1B-VOC-138-3-22	D1B VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/4/2019
RA-F20	D1B-VOC138-1-22	D1B VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/4/2019
RA-F20	D1B-VOC138-2-22	D1B VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/4/2019
RA-D1D	VOC-138-2-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-2-120	3/4/2019
RA-D1C	D1C-VOC138-1-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-1-120	3/6/2019
RA-D1X	D1X-VOC138-3-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-3-20	3/6/2019
RA-D1X	D1X-VOC138-2-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-2-20	3/6/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX05RA	3/8/2019
RA-D1C	D1C-VOC138-1-120	Shutdown D1C-VOC138-1-120 (night shift) and Replace Combustion Air Damper(day shift) on D1C-VOC138-1-120 (see log)	3/9/2019
RA-D1X	D1X-VOC138-1-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/12/2019
RA-D1X	D1X-VOC138-1-20	Technical PM Procedure See Document Management System for 1275MAX06RA	3/12/2019
RA-D1X	D1X-VOC138-3-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/12/2019
RA-D1X	D1X-VOC138-4-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/12/2019
RA-D1X	D1X-VOC138-5-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/12/2019
RA-D1X	D1X-VOC138-6-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/12/2019
RA-D1X	D1X-VOC138-7-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/12/2019
RA-D1X	D1X-SC133-4-00	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1X-SC133-4-00	3/16/2019
RA-D1C	D1C-SC133-4-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1C-SC133-4-100	3/17/2019
RA-D1D	VOC-138-1-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/17/2019
RA-D1D	VOC-138-2-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/17/2019
RA-D1D	VOC-138-3-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/17/2019
RA-D1D	VOC138-4-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	3/17/2019
RA-F20	D1B-VOC138-2-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC138-2-22	3/20/2019
RA-D1X	D1X2A-SC133-4-00	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1X2A-SC133-4-00	3/20/2019
RA-D1D	SC-133-6-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM SC-133-6-100	3/27/2019
RA-D1C	D1C-VOC138-3-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-3-120	3/27/2019
RA-D1X	D1X-SC133-1-00	D1X_SC133_1_11 Make-up water bypass valve replacement	4/1/2019

Site	Asset	Work Order Description	Date
RA-D1C	D1C-SC133-1-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM D1C-SC133-1-100	4/1/2019
RA-D1C	D1C-VOC138-1-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	4/3/2019
RA-D1C	D1C-VOC138-2-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	4/3/2019
RA-D1X	D1X-VOC138-6-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-6-20	4/3/2019
RA-D1C	D1C-VOC138-3-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	4/3/2019
RA-D1X	D1X-VOC138-5-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-5-20	4/3/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX06RA	4/3/2019
RA-F20	D1B-VOC-138-3-22	Replace Rotor Seal (w/ Night Shutdown/Day Startup)	4/4/2019
RA-F20	D1B-VOC138-1-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC138-1-22	4/4/2019
RA-D1D	VOC-138-3-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-3-120	4/9/2019
RA-D1D	VOC-138-1-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-1-120	4/10/2019
RA-D1C	D1C-VOC138-1-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-1-120	4/11/2019
RA-F20	D1B-VOC-138-3-22	VOC 3 Rebalance	4/14/2019
RA-D1D	VOC138-4-120	VOC Abatement System (EXVO) (Sequenced) PM VOC138-4-120	4/17/2019
RA-F20	D1B-VOC-138-3-22	Seal gap verification and adjustment on entire asset	4/17/2019
RA-D1D	SC-133-6-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber Annual PM Job Plan	4/22/2019
RA-D1D	SC-133-1-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM SC-133-1-100	4/27/2019
RA-F20	F20-SC133-1-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM F20-SC133-1-111	5/1/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX05RA	5/5/2019
RA-D1D	VOC-138-2-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-2-120	5/5/2019
RA-D1C	RB1-SC133-1-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM RB1-SC133-1-111	5/13/2019
RA-D1C	D1C-VOC138-2-120	(Requires Shutdown) Replace Rotor gear box D1C_VOC138_2_120 (See Log)	5/14/2019
RA-D1X	D1X-VOC138-2-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	5/19/2019
RA-D1X	D1X-VOC138-3-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	5/19/2019
RA-D1X	D1X-VOC138-4-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	5/19/2019
RA-F20	D1B-VOC-138-3-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC-138-3-22	5/20/2019
RA-D1X	D1X-VOC138-4-20	Replace rotor gasket seal (see log)	5/21/2019
RA-D1X	D1X-VOC138-1-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-1-20	5/21/2019
RA-D1X	D1X-VOC138-5-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	5/22/2019
RA-D1X	D1X-VOC138-6-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	5/22/2019
RA-D1X	D1X-VOC138-7-20	D1X VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	5/22/2019
RA-F20	D1B-VOC138-1-22	D1B VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	5/24/2019

Site	Asset	Work Order Description	Date
RA-F20	D1B-VOC138-2-22	D1B VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	5/24/2019
RA-D1C	RB1-SC133-4-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM RB1-SC133-4-111	5/27/2019
RA-D1C	D1C-SC133-2-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM D1C-SC133-2-100	5/28/2019
RA-D1D	SC-133-2-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM SC-133-2-100	5/29/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX05RA	5/31/2019
RA-D1D	VOC-138-1-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	6/5/2019
RA-D1D	VOC138-4-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	6/5/2019
RA-D1D	VOC-138-2-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	6/5/2019
RA-D1D	VOC-138-3-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	6/5/2019
RA-F20	F20-SC133-1-111	(Rotation Required) Clean/ replace spray nozzles in D1B SC#1	6/12/2019
RA-D1D	VOC-138-3-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-3-120	6/13/2019
RA-D1C	RB1-SC133-6-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM RB1-SC133-6-111	6/15/2019
RA-F20	D1B-VOC138-1-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC138-1-22	6/16/2019
RA-D1C	D1C-VOC138-2-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-2-120	6/17/2019
RA-D1C	D1C-VOC138-2-120	D1C_VOC138-2-120 Repalce rotor 1 gear box	6/18/2019
RA-D1D	SC-133-3-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM SC-133-3-100	6/19/2019
RA-F20	D1B-VOC138-2-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC138-2-22	6/21/2019
RA-D1C	D1C-VOC138-3-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-3-120	6/23/2019
RA-F20	F20-SC133-2-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM F20-SC133-2-111	7/2/2019
RA-D1C	D1C-SC133-1-200	(eRequest not needed for Semi-Annual) Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1C-SC133-1-200	7/7/2019
RA-D1X	D1X2A-VOC138-1-20	Ronler Acers VOC Abatement System (EXVO) Sequenced PM Job Plan D1X2A-VOC138-1-20	7/8/2019
RA-D1X	D1X2A-VOC138-2-20	Ronler Acers VOC Abatement System (EXVO) Sequenced PM Job Plan D1X2A-VOC138-2-20	7/8/2019
RA-D1D	RP1-SC133-1-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM RP1-SC133-1-100	7/8/2019
RA-D1C	D1C-VOC138-1-120	Replace Flame Rod	7/13/2019
RA-D1X	D1X-VOC138-7-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-7-20	7/15/2019
RA-D1C	D1C-VOC138-1-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-1-120	7/16/2019
RA-D1C	RB1-SC133-2-111	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM RB1-SC133-2-111	7/20/2019
RA-D1D	VOC-138-1-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-1-120	7/21/2019
RA-D1C	D1C-SC133-3-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM D1C-SC133-3-100	7/22/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX05RA	7/28/2019
RA-D1D	SC-133-1-200	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Sequenced) PM SC-133-1-200	8/5/2019
RA-D1D	VOC-138-3-120	VOC Rebalance	8/7/2019

Site	Asset	Work Order Description	Date
RA-D1D	SC-133-4-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM SC-133-4-100	8/7/2019
RA-D1D	SC-133-5-100	Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM SC-133-5-100	8/15/2019
RA-D1D	VOC-138-2-120	VOC Rebalance	8/16/2019
RA-D1D	VOC138-4-120	VOC Abatement System (EXVO) (Sequenced) PM VOC138-4-120	8/19/2019
RA-D1D	VOC-138-2-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-2-120	8/20/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX05RA	8/22/2019
RA-D1D	VOC-138-3-120	CHECK SEALS REPLACE AS NEEDED, BOROSCOPE CONCETRATOR LOOP, INSPECT OXIDIZER DAMPER SHUT DOWN AND MONITER DIRECTION OF	8/24/2019
RA-F20	D1B-VOC138-1-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC138-1-22	8/24/2019
RA-D1X	D1X-SC133-2-00	EXSC Scrubber Sequenced PM Hierarchy D1X-SC133-2-00	8/25/2019
RA-D1X	D1X2A-SC133-4-00	Replace broken blowdown actuating valve (see log)	8/29/2019
RA-D1D	VOC-138-2-120	SEAL REPLACEMENT AND OVERVOLTAGE DIAG.	8/30/2019
RA-D1C	RB1-SC133-8-111	RB1-SC133-8-111 Replace main drain valve. (pair with WO# 24486782) (See log & PTP is attached)	9/1/2019
RA-D1C	RB1-SC133-8-111	EXSC Scrubber Sequenced PM Hierarchy RB1-SC133-8-111	9/1/2019
RA-D1C	RB1-SC133-7-111	EXSC Scrubber Sequenced PM Hierarchy RB1-SC133-7-111	9/3/2019
RA-D1C	D1C-SC133-1-200	(eRequest) EXSC Scrubber (Secuenced) PM D1C-SC133-1-200	9/4/2019
RA-D1D	RP1-SC133-2-100	EXSC Scrubber Sequenced PM Hierarchy RP1-SC133-2-100	9/6/2019
RA-F20	D1B-VOC-138-3-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC-138-3-22	9/8/2019
RA-D1X	D1X-SC133-2-00	Replace Paddle Wheel	9/9/2019
RA-D1X	D1X-VOC138-1-20	Technical PM Procedure See Document Management System for 1275MAX05RA	9/11/2019
RA-D1X	D1X-VOC138-5-20	Replace Faulty AFD Keypads For Stage 1 and Stage 2 Desorbtion Fans	9/11/2019
RA-D1X	D1X-SC133-5-00	Purge pumps (MOTORS ONLY) with RP ONLINE D1X-SC133-5-00 (see log)	9/15/2019
RA-F20	D1B-VOC138-2-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC138-2-22	9/18/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX06RA	9/20/2019
RA-D1C	D1C-VOC138-3-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	9/20/2019
RA-D1X	D1X-SC133-1-00	Replace paddle wheel assembly and saddle	9/21/2019
RA-D1C	D1C-SC133-1-100	EXSC Scrubber Sequenced PM Hierarchy D1C-SC133-1-100	9/22/2019
RA-D1X	D1X-VOC138-5-20	Replace Rotor Seals (See Log)	9/23/2019
RA-D1X	D1X-VOC138-5-20	Replace seal, rotor 2 downstream #24 inside small access door; FAT desorb damper (See Log)	9/27/2019
RA-D1X	D1X-VOC138-5-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-5-20	9/28/2019
RA-D1X	D1X-SC133-4-00	EXSC Scrubber Sequenced PM Hierarchy D1X-SC133-4-00	10/2/2019
RA-D1X	D1X2A-VOC138-1-20	Ronler Acers VOC Abatement System (EXVO) Sequenced PM Job Plan D1X2A-VOC138-1-20	10/3/2019
RA-D1X	D1X-VOC138-1-20	Technical PM Procedure See Document Management System for 1275MAX05RA	10/3/2019



Site	Asset	Work Order Description	Date
RA-D1D	VOC-138-3-120	(see log) VOC Abatement System (EXVO) (Sequenced) PM VOC-138-3-120	10/4/2019
RA-D1C	D1C-SC133-4-100	EXSC Scrubber Sequenced PM Hierarchy D1C-SC133-4-100	10/4/2019
RA-D1X	D1X-VOC138-3-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-3-20	10/6/2019
RA-D1X	D1X-VOC138-6-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-6-20	10/7/2019
RA-D1D	VOC138-4-120	VOC Abatement System (EXVO) (Sequenced) PM VOC138-4-120	10/7/2019
RA-D1X	D1X-SC133-2-00	Replace key on inlet isolation blast gate	10/8/2019
RA-D1C	D1C-VOC138-1-120	VOC Abatement System (EXVO) (Sequenced) PM D1C-VOC138-1-120	10/8/2019
RA-D1X	D1X2A-SC133-4-00	Completed with exceptions. PM to be repeated when construction is complete).EXSC Scrubber Sequenced PM Hierarchy D1X2A-SC133-4-00	10/9/2019
RA-D1X	D1X-VOC138-7-20	Replace Faulty Low Gas Pressure Switch (PSL138-7-03)	10/9/2019
RA-D1X	D1X2A-SC133-2-00	conductivity probe replacement	10/10/2019
RA-D1D	VOC-138-1-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-1-120	10/12/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX05RA	10/17/2019
RA-D1D	SC-133-6-100	(SEE LOG) Ronler Acers Scrubbed Exhaust (EXSC) Scrubber (Secuenced) PM SC-133-6-100	10/21/2019
RA-D1D	SC-133-1-100	EXSC Scrubber Sequenced PM Hierarchy SC-133-1-100	10/22/2019
RA-D1X	D1X-VOC138-1-20	Technical PM Procedure See Document Management System for 1275MAX05RA	11/2/2019
RA-D1D	VOC-138-3-120	VOC Rebalance	11/6/2019
RA-F20	D1B-VOC138-1-22	D1B VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	11/10/2019
RA-F20	D1B-VOC138-2-22	D1B VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	11/10/2019
RA-F20	D1B-VOC-138-3-22	D1B VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	11/10/2019
RA-D1X	D1X-VOC138-1-20	Replace Combustion Air Actuator on D1X 138-1-20 VOC #1	11/12/2019
RA-D1C	RB1-SC133-4-111	EXSC Scrubber Sequenced PM Hierarchy RB1-SC133-4-111	11/13/2019
RA-D1X	D1X-VOC138-1-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-1-20	11/13/2019
RA-D1D	VOC-138-2-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-2-120	11/14/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX05RA	11/15/2019
RA-F20	F20-SC133-1-111	EXSC Scrubber Sequenced PM Hierarchy F20-SC133-1-111	11/20/2019
RA-D1C	RB1-SC133-1-111	EXSC Scrubber Sequenced PM Hierarchy RB1-SC133-1-111	11/20/2019
RA-D1X	D1X2A-VOC138-2-20	Ronler Acers VOC Abatement System (EXVO) Sequenced PM Job Plan D1X2A-VOC138-2-20	11/22/2019
RA-D1X	D1X2A-SC133-3-00	EXSC Scrubber Sequenced PM Hierarchy D1X2A-SC133-3-00	11/22/2019
RA-D1X	PUB1-SC133-1-00	EXSC Scrubber (Sequenced) PM PUB1-SC133-1-00	11/23/2019
RA-D1X	D1X-VOC138-6-20	VOC Abatement System D1X-VOC138-6-20 Adjust both inertia Bases for ground level fans (see log)	11/24/2019
RA-F20	D1B-VOC138-1-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC138-1-22	11/24/2019
RA-F20	D1B-VOC-138-3-22	VOC Abatement System (EXVO) (Sequenced) PM D1B-VOC-138-3-22	11/24/2019

Site	Asset	Work Order Description	Date
RA-D1D	SC-133-2-100	EXSC Scrubber Sequenced PM Hierarchy SC-133-2-100	11/24/2019
RA-D1X	D1X2A-SC133-2-00	EXSC Scrubber Sequenced PM Hierarchy D1X2A-SC133-2-00	11/26/2019
RA-D1X	D1X-VOC138-7-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-7-20	11/26/2019
RA-D1X	D1X-VOC138-1-20	Technical PM Procedure See Document Management System for 1275MAX05RA	11/29/2019
RA-D1X	D1X-VOC138-4-20	Replace bolts on preheat fan bell housing cover	11/30/2019
RA-D1X	D1X-VOC138-4-20	VOC Abatement System (EXVO) (Sequenced) PM D1X-VOC138-4-20	11/30/2019
RA-D1C	D1C-SC133-2-100	EXSC Scrubber Sequenced PM Hierarchy D1C-SC133-2-100	12/4/2019
RA-D1D	VOC138-4-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	12/6/2019
RA-D1D	VOC-138-1-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	12/6/2019
RA-D1D	VOC-138-3-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	12/6/2019
RA-D1D	VOC-138-2-120	D1D VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	12/6/2019
RA-D1C	D1C-SC133-2-100	(Duplicate WO) Replace D1C EXSC Scrubber #2 Recirculation Strainer Isolation Valves	12/6/2019
RA-D1X	D1X2A-SC133-4-00	EXSC Scrubber Sequenced PM Hierarchy D1X2A-SC133-4-00	12/10/2019
RA-D1D	VOC-138-3-120	VOC Abatement System (EXVO) (Sequenced) PM VOC-138-3-120	12/13/2019
RA-D1C	D1C-VOC138-1-120	Technical PM Procedure See Document Management System for 1275MAX06RA	12/21/2019
RA-D1C	D1C-VOC138-1-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	12/21/2019
RA-D1C	D1C-VOC138-2-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	12/21/2019
RA-D1C	D1C-VOC138-3-120	D1C VOC Abatement System (EXVO) (Sequenced) PM--ROUTE	12/21/2019
RA-D1C	RB1-SC133-6-111	EXSC Scrubber Sequenced PM Hierarchy RB1-SC133-6-111	12/23/2019
RA-D1X	D1X2A-VOC138-1-20	Ronler Acers VOC Abatement System (EXVO) Sequenced PM Job Plan D1X2A-VOC138-1-20	12/23/2019

Site	Asset	Work Order Description	Date
F15	F15-AU138-2-10	F15 Munters 2 (Fab impact: 724048)	3/26/2019
F15	F15-AU138-1-10	F15 Munters 1 (1Y, 6M, NN Fab Impact)	3/28/2019
F15	F15-AU138-1-10	2019 AFO Annual ECP - F15 Munters 1 (Fab Impact: 740225) Annual	6/10/2019
F15	F15-AU138-2-10	F15 Munters 2 (Fab Impact: 741038) Annual	6/17/2019
F15	F15-AU138-2-10	F15 Munters 2	9/10/2019
F15	F15-TT138-1-74A	F15 Munters1 RCTO Oxidizer temperature Calibration (Fab Impact: 753361)	9/11/2019
F15	F15-AU138-1-10	F15 Munters 1 (1Y, 6M, NN Fab Impact)	9/11/2019
F15	F15-TT138-1-45A	F15 Munters1 RCTO Desorb temperature Calibration (Fab Impact: 753361)	9/11/2019
F15	F15-PDIT138-1-16A	F15 Munters 1 Process DP Calibration (Fab Impact: 753361)	9/11/2019
F15	F15-FIT138-1-20A	F15 Munters 1 NG flow meter Calibration (Fab Impact: 753361)	9/11/2019
F15	F15-TT138-1-56A	F15 Munters 1 RCTO rotor 1 desorb temperature calibration (Fab Impact: 753361)	9/11/2019
F15	F15-TT138-2-74A	F15 Munters2 RCTO Oxidizer temperature Calibration (Fab Impact: 753985)	9/18/2019
F15	F15-TT138-2-45A	F15 Munters 2 RCTO Desorb temperature Calibration (Fab Impact: 753985)	9/18/2019
F15	F15-PDIT138-2-16A	F15 Munters 2 Process DP Calibration (Fab Impact: 753985)	9/18/2019
F15	F15-FIT138-2-20A	F15 Munters 2 NG flow meter Calibration (Fab Impact: 753985)	9/18/2019
F15	F15-TT138-2-56A	F15 Munters 2 RCTO rotor 1 desorb temperature calibration (Fab Impact: 753985)	9/18/2019
F15	F15-AU138-1-10	F15 Munters 1 (1Y, 6M, NN Fab Impact) F15-AU138-1-10, Sequenced (Fab Impact: 770145) Semi annual	12/12/2019
F15	F15-AU138-2-10	F15 Munters 2 (Fab Impact: 741038) semi annual	12/16/2019