



MEMORANDUM

TO: **FILE – ATK Space Systems, LLC - Clearfield**

THROUGH: Rik Ombach, Minor Source Compliance Section Manager 

FROM: Daniel Riddle, Environmental Scientist 
DR

DATE: September 29, 2022

SUBJECT: **FULL COMPLIANCE INSPECTION**, Minor, Davis County

INSPECTION DATE: August 16, 2022

SOURCE LOCATION: Freeport Center 14th Street
Clearfield, 84016

DIRECTIONS: Building C-14

SOURCE CONTACTS: Jeff Schmidt, EH&S Engineer
801-698-6499 j.schmidt@ngc.com

OPERATING STATUS: Operating normally at the time of inspection.

PROCESS DESCRIPTION: Manufactures composite components for the aerospace industry specifically for commercial and defense contractors. This source is highly secured and much of the process information is confidential. The source operates natural gas fired equipment including curing ovens, boilers, burners, and autoclaves. The source also operates paint booth operations equipped with filters and ventilation systems; various dust collectors, five natural gas-fired emergency generators, one diesel-fired emergency generator, and various laboratory and chemical mixing operations.

APPLICABLE REGULATIONS: Approval Order (AO) DAQE-AN101520028-22, dated September 26, 2022

NSPS (Part 60) -III : Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,
NSPS (Part 60) -JJJ : Standards of Performance for Stationary Spark Ignition Internal Combustion Engines,
MACT (Part 63) -ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,

SOURCE EVALUATION:

Name of Permittee:

ATK Space Systems, LLC - Clearfield
PO Box 160433
Clearfield, UT 840160433

Permitted Location:

Freeport Center 14th Street
Clearfield, 84016

SIC Code:

3728: (Aircraft Parts & Auxiliary Equipment, NEC)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
- I.7 The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
- I.8 The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

Status: In Compliance. No limits set forth in this AO have been exceeded. The source stated that there have been no modifications to the equipment or processes. An NOI has been submitted for the future addition of fume hoods; no other modifications to equipment were observed. Records are kept as required and were made available after the inspection. No breakdowns have been reported since the previous inspection. An emissions inventory was submitted in 2020 and emissions data are reported below. The new AO will likely be in effect before construction status documentation is due in February 2023.

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

II.A.1 ATK Space Systems, LLC

Aerospace composite components manufacturing facility

II.A.2 Four (4) Electric Curing Ovens

Venting: Atmospheric

Ovens: O-21; O-36; O-159; O-160

II.A.3 Thirteen (13) Natural Gas-Fired Ovens

Oven:	Rating:
O-26	1.2 MMBtu/hr
O-27	4.0 MMBtu/hr
COV1	2.8 MMBtu/hr
COV2	4.0 MMBtu/hr
O-30	3.5 MMBtu/hr
O-22	2.0 MMBtu/hr
O-24	0.6 MMBtu/hr
O-37	3.0 MMBtu/hr
O-39	6.4 MMBtu/hr
NEW	3.0 MMBtu/hr
NEW	2.5 MMBtu/hr
O-41	1.0 MMBtu/hr
NEW	3.8 MMBtu/hr

II.A.4 Seven (7) Hot Rooms

Rooms: ACU253, AHU1, AHU2, AHU3, AHU4, HR1, HR3

Fuel: Natural Gas

Maximum Rating: <5 MMBtu/hr Each

II.A.5 One (1) Boiler- BO1

Fuel: Natural Gas

Rating: 8.37 MMBtu/hr

II.A.6 Three (3) Autoclaves

Fuel: Natural Gas

Autoclave:	Rating:
AC1	12.0 MMBtu/hr
AC6	24.3 MMBtu/hr
AC12	15.0 MMBtu/hr

II.A.7 Five (5) Autoclaves

Autoclaves: CAC1, CAC2, CAC3, CAC4, CAC5

Fuel: Natural Gas

Rating: 15.8 MMBtu/hr Each

II.A.8 Eleven (11) Ventilation Rooms

Nine (9) Mandrel Prep Rooms (**One (1) NEW**); FX-141; Paint Touchup Room

II.A.9 Eleven (11) Laboratory Hoods

FUH-3; FUH-7; AT-401076; FUH-5; FUH-2; AT-401706; FE-200; FE-222; FUH-1; SB-2; H-5
IR&D (**NEW**)

II.A.10 Twelve (12) Exhaust Hoods

1,2.	Two (2) Welding fume exhausters
3.	RMS-6

4. Battery Charging area exhaust hood
5. MX-85
6. M-5
7. 83310J00475
8. E-145
9. Tacking Table
10. FX-105
11. FX-106
12. FE-655

II.A.11 Four (4) Heated Paint Booths

Fuel: Natural Gas

Control: Vacuum System

Paint Booth:	Heater Rating:
SB10	750 KBtu/hr
SB11	950 KBtu/hr
SB12	950 KBtu/hr
SB13	950 KBtu/hr

II.A.12 Four (4) Spray Booths

SB7, SB9, SB5, SB14

II.A.13 Eight (8) Natural Gas-Fired Emergency Generators

Engine: Rating:

GE 3	7 kW
GE 4	35 kW
GE 5	100 kW
GE 8	80 kW
GE 9	240 kW
GE 10	45 kW
GE 11	45 kW
GE 12	85 kW

II.A.14 Two (2) Diesel-Fired Emergency Generators

Engine: GE 7

Rating: 225 kW

Engine: GE 13 (**NEW**)

Rating: 268 hp

NSPS Applicability: Subpart IIII

MACT Applicability: Subpart ZZZZ

II.A.15 Ten (10) Dust Collectors

DC-16, DC-18, DC-27, DC-28, DC-29, DC-30, DC-36, DC-37, DC-38, DC-35 (**NEW**)

II.A.16 Miscellaneous Equipment

Miscellaneous vacuum pumps

Miscellaneous Air compressors

Miscellaneous 3D printers with capture hood (**NEW**)

II.A.17 Miscellaneous Combustion Equipment

Various Boilers and Heaters

Rating: <5 MMBtu/hr

Fuel: Natural Gas

II.A.18 Nineteen (19) Wet Cooling Towers

CT-6, CT-7, CT-9, CT-13, CT-14, CT-15, CT-16, CT-17, CT-18, CT-19, CT-20, CT-21, CT-22, CT-23, CT-24, CT-25, CT-26 (**NEW**), CT-A (**NEW**), CT-B (**NEW**)

Controls: High Efficiency Drift Eliminators (each)

II.A.19 **Informational-Only Equipment***

9 electrical sample curing ovens
1 electrical Hot room
5 electrical autoclaves
1 Buffer room
Miscellaneous Dust Collectors, including portable and orifice scrubbers
Miscellaneous Machining Centers / Lathes / Cork Cutting Equipment
1 Spray Gun Cleaning Station
Miscellaneous Grit Blast and Abrading Equipment
3D Printers
3 Hot Drape Forming Machines
1 Tacking Table

*This equipment does not vent to atmosphere and is listed for informational purposes only

II.A.20 **Informational-Only Equipment* (Continued)**

2 Reticulators
2 Dry Cooling Towers

*This equipment does not vent to atmosphere and is listed for informational purposes only

II.A.21 **Grandfathered Equipment***

Pit exhaust system
Indirect gas fired curing oven - #20
Rating: 6 MMBtu/hr

*This equipment was installed before 1969 and is listed for informational purposes only

Status: In Compliance. Not all equipment was observed since it is spread over several buildings. All equipment in C14 was observed with no additional equipment present. The two diesel generators in Condition II.A.14 are locked up outside and are almost never used.

II.B Requirements and Limitations

II.B.1 **Site-Wide Requirements**

II.B.1.a The owner/operator shall not allow visible emissions from the following emission points to exceed the following values:

A. Diesel-fired emergency engines - 20% opacity

B. All other emission points - 10% opacity

[R307-401-8]

II.B.1.a.1 Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8]

Status: In Compliance. No visible emissions were observed at the time of inspection. Method 9 was utilized to verify opacity limits. See attached VEO form.

II.B.1.b The owner/operator shall not exceed a plant-wide natural gas consumption limit of 406,624 Decatherms per rolling 12-month period. [R307-401-8]

II.B.1.b.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Natural

gas consumption shall be determined by gas billing records and shall be kept on a monthly basis for all periods when the plant is in operation. [R307-401-8]

- II.B.1.c The owner/operator shall comply with all applicable requirements of UAC R307-355 for VOC sources. [R307-355]

Status: In Compliance. The source is familiar with R307-355. The site uses the Orbital ATK Tracking Program: "Materials - Costpoint" to determine compliance with material VOC limits. The source uses HVLP spray guns to apply coatings to aerospace components. Containers on site were closed, and no visible spills were noted during the inspection.

II.B.2 **VOC & H**

- II.B.2.a The owner/operator shall not emit more than the following from all sources on site:

- A. 69.00 tons per rolling 12-month period of VOCs
- B. 19.00 tons per rolling 12-month period of all HAPs combined
- C. 2.00 tons per rolling 12-month period of 2-Butoxyethanol
- D. 0.014 tons per rolling 12-month period of Chromium Compounds
- E. 2.00 tons per rolling 12-month period of Cumene
- F. 2.00 tons per rolling 12-month period of Ethyl Acrylate
- G. 2.00 tons per rolling 12-month period of Ethylbenzene
- H. 2.00 tons per rolling 12-month period of Ethylene Glycol
- I. 0.50 tons per rolling 12-month period of Formaldehyde
- J. 1.20 tons per rolling 12-month period of Generic HAPs
- K. 2.00 tons per rolling 12-month period of Glycol Ethers
- L. 0.007 tons per rolling 12-month period of Hexamethylene-1,6-Diisocyanate
- M. 2.00 tons per rolling 12-month period of Hexane
- N. 0.010 tons per rolling 12-month period of Hydrogen Fluoride
- O. 2.00 tons per rolling 12-month period of Methyl Alcohol
- P. 0.01 tons per rolling 12-month period of Methyl Isocyanate
- Q. 2.00 tons per rolling 12-month period of Methylene Chloride
- R. 0.10 tons per rolling 12-month period of Methylenedianiline
- S. 0.010 tons per rolling 12-month period of Methylene Diphenyl Diisocyanate
- T. 2.00 tons per rolling 12-month period of Methyl Isobutyl Ketone (MIBK)
- U. 2.00 tons per rolling 12-month period of Naphthalene
- V. 2.00 tons per rolling 12-month period of Phenol
- W. 2.00 tons per rolling 12-month period of Tetrachloroethylene

- X. 2.00 tons per rolling 12-month period of Toluene
- Y. 9.50 tons per rolling 12-month period of 1,1,1-Trichloroethane
- Z. 2.00 tons per rolling 12-month period of 1,1,2-Trichloroethane
- AA. 2.00 tons per rolling 12-month period of Trichloroethylene
- BB. 2.00 tons per rolling 12-month period of Xylene

[R307-401-8]

- II.B.2.a.1 The owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. The owner/operator shall use a mass-balance method to calculate emissions from evaporative sources. The owner/operator may use the following equations with applicable units to comply with the mass-balance method:

VOCs = [% VOCs by Weight/100] x [Density] x [Volume Consumed]

HAP = [% HAP by Weight/100] x [Density] x [Volume Consumed]

[R307-401-8]

- II.B.2.a.2 The owner/operator shall use a mass-balance method to quantify any amount of VOCs and HAPs reclaimed. The owner/operator shall subtract the amount of VOCs and HAPs reclaimed from the quantities calculated above to provide the monthly total emissions of VOCs and HAPs. [R307-401-8]

- II.B.2.a.3 The owner/operator shall keep records each month of the following:

- A. The name (as per SDS) of the VOC- and HAP-emitting material
- B. The maximum percent by weight of VOCs and each HAP in each material used
- C. The density of each material used
- D. The volume of each VOC- and HAP-emitting material used
- E. The amount of VOCs and the amount of each HAP emitted from each material
- F. The amount of VOCs and the amount of each HAP reclaimed and/or controlled from each material
- G. The total amount of VOCs, the total amount of each HAP, and the total amount of all HAPs combined emitted from all materials (in tons)

[R307-401-8]

Status: In Compliance. VOC and HAP emissions appear to be calculated correctly. For the rolling 12-month period from August 2021 - July 2022, emissions are as follows:

A. 29.247 tons for VOCs

B. 0.979 tons for total HAPs combined

C. 0.00 tons for 2-Butoxyethanol

D. 0.00064 tons for Chromium Compounds

- E. 0.0011 tons for Cumene**
- F. 0.00 tons for Ethyl Acrylate**
- G. 0.054 tons for Ethylbenzene**
- H. 0.067 tons for Ethylene Glycol**
- I. 0.000043 tons for Formaldehyde**
- J. 0.021 tons for Generic HAPs**
- K. 0.038 tons for Glycol Ethers**
- L. 0.0023 tons for Hexamethylene-1,6-Diisocyanate**
- M. 0.0018 tons for Hexane**
- N. 0.0000065 tons per rolling 12-month period for Hydrogen Fluoride**
- O. 0.105 tons for Methyl Alcohol**
- P. 0.00 tons for Methyl Isocyanate**
- Q. 0.0058 tons for Methylene Chloride**
- R. 0.00 tons for Methylene Dianiline**
- S. 0.00053 for Methylene Diphenyl Diisocyanate**
- T. 0.27 tons for Methyl Isobutyl Ketone (MIBK)**
- U. 0.00 tons for Naphthalene**
- V. 0.00 tons for Phenol**
- W. 0.000085 tons for Tetrachloroethylene**
- X. 0.069 tons for Toluene**
- Y. 0.00 tons for 1,1,1-Trichloroethane**
- Z. 0.00 tons for 1,1,2-Trichloroethane**
- AA. 0.00 tons for Trichloroethylene**
- BB. 0.29 tons per rolling 12-month period for Xylene**

II.B.3 Paint Booth Requirements

- II.B.3.a** The owner/operator shall equip each paint booth with paint arrestor particulate filters to control particulate emissions. All exhaust air from the paint booths shall be routed through the filters before venting to the atmosphere. [R307-401-8]

Status: In Compliance. Filters were observed inside the paint booths. The source indicated that each paint booth was equipped with paint arrestor particulate filters and that all exhaust air from the paint booths was routed through the filters before venting to the atmosphere.

- II.B.3.b** The paint booths shall be equipped with HVLP spray guns, or an equivalent method, to control VOC emissions. [R307-355-6]

II.B.4 Emergency Engines

II.B.4.a The owner/operator shall not operate each emergency engine on site for more than 100 hours per calendar year during non-emergency situations. There is no time limit on the use of the engines during emergencies. [40 CFR 63 Subpart ZZZZ, R307-401-8]

II.B.4.a.1 To determine compliance with a calendar year total, the owner/operator shall calculate a new yearly total by January 31st using data from the previous calendar year. Records documenting the operation of each emergency engine shall be kept in a log and shall include the following:

- A. The date the emergency engine was used
- B. The duration of operation in hours
- C. The reason for the emergency engine usage

[40 CFR 63 Subpart ZZZZ, R307-401-8]

II.B.4.a.2 To determine the duration of operation, the owner/operator shall install a non-resettable hour meter for each emergency engine. [40 CFR 63 Subpart ZZZZ, R307-401-8]

Status: In Compliance. Each emergency generator has a non-resettable hour meter. Hours for each generator for 2021 non-emergency usage are as follows:

GE-3: 0.4 hours
GE-4: 22.2 hours
GE-5: 3.2 hours
GE-7: 8 hours
GE-8: 0.8 hours
GE-9: 23 hours
GE-10: 24.3 hours
GE-11: 28.6 hours
GE-12: 1.7 hours
GE-13: 1.8 hours

II.B.5 Fuel Requirements

II.B.5.a The owner/operator shall use only natural gas as a fuel in all fuel-burning furnaces, ovens, boilers, heaters, and natural gas-fired emergency engines. [R307-401-8]

Status: In Compliance. ATK Space Systems uses only natural gas as a fuel in all fuel burning furnaces, ovens, and boilers.

II.B.5.b The owner/operator shall only use diesel fuel (fuel oil #1, #2 or diesel fuel oil additives) in the diesel-fired emergency engines. All diesel burned shall meet the definition of ultra-low sulfur diesel (ULSD) and contain no more than 15 ppm sulfur. [R307-401-8]

II.B.5.b.1 To demonstrate compliance with the diesel fuel requirements for any diesel fuel purchased, the owner/operator shall keep and maintain fuel purchase invoices. The fuel purchase invoices shall indicate that the diesel fuel meets the ULSD requirements, or the owner/operator shall obtain certification of sulfur content from the fuel supplier. [R307-401-8]

Status: In Compliance. All diesel fuel used in the emergency engines is ULSD. See the attached invoice from Reladyne.

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

NSPS (Part 60) -IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Status: In Compliance. Compliance with this subpart is satisfied by installing a certified engine, maintaining and operating the engines in accordance with the manufacturer's instructions, installation of a non-resettable hour meter, and maintaining records of use. All information provided at the time of inspection indicate generators are being properly maintained and operated in accordance with this subpart.

NSPS (Part 60) -JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Status: In Compliance. This subpart applies to the generators GE 10, GE 11, and GE 12 in condition II.A.13. Compliance with this subpart is satisfied by installing a certified engine, maintaining and operating the engines in accordance with the manufacturer's instructions, installation of a non-resettable hour meter, and maintaining records of use. All information provided at the time of inspection indicate these generators are being properly maintained and operated in accordance with this subpart.

MACT (Part 63) -ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Status: In Compliance. This subpart applies to the generators GE 3, GE 4, GE 5, GE 8, and GE 9 in condition II.A.13 and GE 7 found in condition II.A.14. Stationary RICE located at area sources of HAP emissions must comply with Table 2d to subpart ZZZZ of MACT (Part 63), which requires annual maintenance of hoses, oil, belts, and filters, as well as a non-resettable hour meter on each generator. All information provided at the time of inspection indicate these generators are being properly maintained and operated in accordance with this subpart.

AREA SOURCE RULES EVALUATION:

The following Area Source Rules were evaluated during this inspection:

Davis and Salt Lake Counties and Ozone Nonattainment Areas: Ozone Provisions [R307-325]

Status: In Compliance. All volatile organic compounds appeared to be stored in closed containers, and no spills were noted during the inspection.

Adhesives and Sealants [R307-342]

Status: Not Applicable. Exempt. R307-342-3(2)(b) states that operations that produce, rework, repair, or maintain aerospace vehicles and components are exempt from R307-342.

Miscellaneous Metal Parts and Products Coatings [R307-350]

Status: Not Applicable. Exempt. R307-350-3(1)(c) exempts surface coating of aerospace vehicles and components subject to R307-355.

Control of Emissions from Aerospace Manufacture and Rework Facilities [R307-355]

Status: In Compliance. This area source rule is satisfied by compliance with condition II.B.1.c and condition II.B.3.b of the AO.

EMISSION INVENTORY:

Listed below are the Actual Emissions Inventory provided from ATK Space Systems, LLC - Clearfield. A comparison of the estimated total potential emissions (PTE) on AO: DAQE-AN101520028-22, dated September 26, 2022 is provided.

(PTE) are supplied for supplemental purposes only.

Criteria Pollutant	PTE tons/yr	Actuals tons/yr
Carbon Monoxide	16.38	6.43677
Nitrogen Oxides	19.49	7.67305
Particulate Matter - PM ₁₀	13.20	0.59478
Particulate Matter - PM _{2.5}	12.99	0.59198
Sulfur Dioxide	0.15	0.04769
Volatile Organic Compounds	69.00	45.62382

Hazardous Air Pollutant	PTE lbs/yr	Actuals lbs/yr
1,1,2-Trichloroethane (CAS #79005)	4000	0
2-(2-Butoxyethoxy)-Ethanol (CAS #112345)	4000	N/A
Chromium Compounds (CAS #CMJ500)	27	1.52
Cumene (CAS #98828)	4000	3.02
Ethyl Acrylate (CAS #140885)	4000	N/A
Ethyl Benzene (CAS #100414)	4000	218.76
Ethylene Glycol (CAS #107211)	4000	187.76
Formaldehyde (CAS #50000)	1000	13.76
Generic HAPs (CAS #GHAPS)	2000	N/A
Glycol Ethers (CAS #EDF109)	4000	79.76
Hexamethylene-1,6-Diisocyanate (CAS #822060)	14	9.88
Hexane (CAS #110543)	4000	276.98
Hydrogen Fluoride (Hydrofluoric Acid) (CAS #7664393)	20	0.32
Methanol (CAS #67561)	4000	315.56
Methyl Chloroform (1,1,1-Trichloroethane) (CAS #71556)	19000	N/A
Methyl Isobutyl Ketone (Hexone) (CAS #108101)	4000	974
Methyl Isocyanate (CAS #624839)	20	N/A
Methyl Methacrylate (CAS #80626)	200	23.24
Methylene Chloride (Dichloromethane) (CAS #75092)	4000	35.08
Methylene Diphenyl Diisocyanate (MDI) (CAS #101688)	20	0.08
Naphthalene (CAS #91203)	4000	1
Phenol (CAS #108952)	4000	2.26
Styrene (CAS #100425)	200	3.76
Tetrachloroethylene (Perchloroethylene) (CAS #127184)	4000	2.2

Toluene (CAS #108883)	4000	246.92
Trichloroethylene (CAS #79016)	4000	N/A
Xylenes (Isomers and Mixture) (CAS #1330207)	4000	1170.32

**PREVIOUS ENFORCEMENT
ACTIONS:**

No enforcement actions within the past five years.

**COMPLIANCE STATUS &
RECOMMENDATIONS:**

In regards to Approval Order (AO) DAQE-AN101520028-22, dated September 26, 2022: In compliance at the time of inspection.

HPV STATUS:

Not Applicable.

**RECOMMENDATION FOR
NEXT INSPECTION:**

Inspect at typical frequency. There should be a new AO. Steel-toed boots and safety glasses are required PPE for site walk through. Inspector to stay with source contact at all times.

ATTACHMENTS:

Email correspondence, VEO form, generator usage, rolling 12 emissions, ULSD certification



Daniel Riddle <driddle@utah.gov>

RE: EXT :10152 - Follow up to air quality inspection

3 messages

Schmidt, Jeff [US] (AS) <j.schmidt@ngc.com>
To: Daniel Riddle <driddle@utah.gov>

Tue, Aug 16, 2022 at 2:18 PM

Hi Daniel,

I hope you enjoyed your tour and audit of our facility. Attached are most of your requested documentation.

Condition II.B.1.b - rolling 12-month total of natural gas consumption (July 2021 - June 2022)

ATK Rolling 12 VOC-HAP-Nat Gas Jul 2022, line 84

Condition II.B.2.a - itemized emissions for all VOCs and HAPs listed in the AO (July 2021 - June 2022)

ATK Rolling 12 VOC-HAP-Nat Gas Jul 2022, lines 8-82

NOTE: Gray colored line pairs; top line is that which was issued to the floor, bottom gray are those which weren't emitted (e.g., chromium-based paint which is brushed on rather than sprayed [NE = not emitted], or materials that undergo a chemical reaction such as MDI), the white line above the two gray-colored lines is the total emissions.

Condition II.b.4.a - usage of each generator engine for non-emergency purposes <100 (January 2021 - December 2021)

ATK Emergency Generator Log, 1 worksheet per generator (multiple tabs), line 13

Condition II.B.6.b.1 - invoice for purchase of Ultra Low Sulfur Diesel

Since I need to work with purchasing to get this document, I will send it in a follow-up email.

Let me know if you need anything further (besides the diesel invoices) or have questions on the spreadsheets.

Jeff Schmidt | EH&S Engineer

Northrop Grumman | Aeronautics Systems

O: 801-774-4171 | C: 801-698-6499 | j.schmidt@ngc.com

From: Daniel Riddle <driddle@utah.gov>
Sent: Tuesday, August 16, 2022 1:14 PM
To: Schmidt, Jeff [US] (AS) <j.schmidt@ngc.com>
Subject: EXT :10152 - Follow up to air quality inspection

Jeff,

Thank you for meeting with me today for your air quality inspection. As discussed, here are the records I will require to complete my report:

Condition II.B.1.b - rolling 12-month total of natural gas consumption (July 2021 - June 2022)

Condition II.B.2.a - itemized emissions for all VOCs and HAPs listed in the AO (July 2021 - June 2022)

Condition II.b.4.a - usage of each generator engine for non-emergency purposes <100 (January 2021 - December 2021)

Condition II.B.6.b.1 - invoice for purchase of Ultra Low Sulfur Diesel

Please have these records to me by August 23, 2022.

Best,

Daniel Riddle

2 attachments



ATK Emergency Generator Log.xlsx
41K



ATK Rolling 12 VOC-HAP-Nat Gas Jul 2022.xlsx
44K

Daniel Riddle <driddle@utah.gov>
To: "Schmidt, Jeff [US] (AS)" <j.schmidt@ngc.com>

Wed, Aug 17, 2022 at 9:30 AM

Received, thank you. I'll let you know if I need anything else.
[Quoted text hidden]

Schmidt, Jeff [US] (AS) <j.schmidt@ngc.com>
To: Daniel Riddle <driddle@utah.gov>

Thu, Aug 18, 2022 at 4:40 PM

This diesel fuel invoice should be the last of the documentation you've requested, Daniel. Let me know if there are clarifications that are needed or further questions.

Condition II.B.6.b.1 - invoice for purchase of Ultra Low Sulfur Diesel

ULSF Invoice 8-2-22

Jeff Schmidt | EH&S Engineer

Northrop Grumman | Aeronautics Systems

O: 801-774-4171 | C: 801-698-6499 | j.schmidt@ngc.com

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ULSF Invoice 8-2-22.pdf
163K



STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

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EPA METHOD 9 - VISIBLE EMISSION OBSERVATION FORM

Source Name: ATK Space Systems LLC
Street Address: Freeport Center 14th St Building C14
City/County: Clearfield/Davis
Phone: 801-698-6499
Site ID: 10152
Facility: Aerospace facility
Equipment/Process:
Control Equipment:
Emission Point:

OBSERVATION DATE: 16 Aug. 2022

Start time: ✓ Stop time: ✓

min \ sec	0	15	30	45
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Sky Conditions: Clear ☐ Partly Cloudy ☒ Overcast ☐

Precipitation: No ☒ Yes ☐

Wind: Direction: E Speed: 6 mph

Ambient Temp: 84 °F RH: 0 %

Height Relative to Observer: _____

Distance From Observer: _____

Condensed Water Vapor Present: No ☐ Yes ☐

Attached ☐ Detached ☐

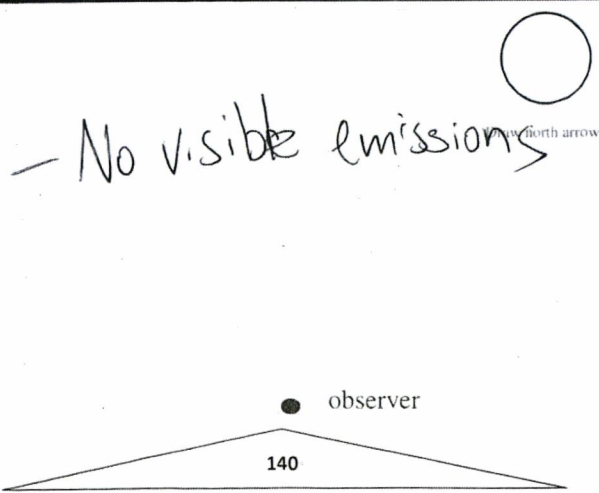
Length of Condensed Water Vapor Plume: _____

Background: _____

Sketch process unit: indicate observer position relative to source; indicate potential emission points and/or actual emission points.

COMMENTS: Required Records (July 2021-June 2022)

- ☒ II.B.1.b - natural gas consumption
- ☒ II.B.2.a - VOC & HAP emissions
- ☒ II.B.4a - emergency engine usage
- ☒ II.B.5.b.1 - ULSD purchase invoice



Sun ☒ Wind ☒ Emission Point with Plume ☐
Observer Position ☒

Observer's Signature: [Signature]

Distrib: white-files; canary-inspector; pink-owner/operator

I have received a copy of these observations:

SIGNATURE: Jeffrey S. Schmidt
Printed Name: JEFF SCHMIDT
Title: ETHS ENGINEER

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-4	Nat. Gas	Spark	35 kW	Kohler	30RZG (4P5)	0729311

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatage frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Generator Requirements					
Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
C14 Electrical Room	2002	3/28/2002	yes	no	n/a

Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
C14 Electrical Room	2002	3/28/2002	yes	no	n/a

g					
		2021	2022	2023	2024
		629.5			
		22.2			
		22.2			
		22.2			
		0			

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-8	Nat. Gas	Spark	80 kW	GenSet	GGHC-4492162	L000180893

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatage frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Generator Requirements					
Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NPS JJJJ	NPS IIII
ACCE Boiler Room	2000	9/29/2010	no	no	n/a

Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
ACCE Boiler Room	2000	9/29/2010	no	no	n/a

g					
		2021	2022	2023	2024
		366.4			
		0.8			
		0.8			
		0.8			
		0			

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-9	Nat. Gas	Spark	240 kW	Catepillar	3406	CBP00317

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatege frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Operator Requirements

Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
B14 Chiller Room	2004	3/12/2012	no	no	n/a

		2021	2022	2023	2024
		256.0			
		23			
		23			
		23			
		0			

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-10	Nat. Gas	Spark	45 kW	Cummins	GG06-1645149	I160999758

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatage frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Operator Requirements

Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
G12 East Dock (North)	Sep-16		no	yes	n/a

gg					
		2021	2022	2023	2024
		118.6			
		24.3			
		24.3			
		24.3			
		0			

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-12	Nat. Gas	Spark	85 kW	Cummins	GGHG-1650475	J160112030

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatage frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Operator Requirements

Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
G12 East Dock (South)	Oct-16	Jun-16	no	yes	n/a

gg					
		2021	2022	2023	2024
		19.0			
		1.7			
		1.7			
		1.7			
		0			

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-3	Nat. Gas	Spark	7 kW	Kohler	7RMY62	233235

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatage frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Operator Requirements

Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
H10 Fire Riser Room	1961?	?	yes	no	n/a

b)					
		2021	2022	2023	2024
		105.2			
		0.4			
		0.4			
		0.4			
		0			

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-5	Nat. Gas	Spark	100 kW	GenSet	100 ENTXL	I910417183

						Hours Lo
Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatage frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Operator Requirements

Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
H10 NE Pad	1991	12/28/2005	yes	no	n/a

	2021	2022	2023	2024	2025
	15.2				
	3.2				
	3.2				
	3.2				
	0				

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-7	Diesel	Compressio	225 kW	Cat Power	XQ 225	8JJ00644

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatege frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Generator Requirements					
Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
H10 SE Pad	Approx 2003	3/12/2008	no	n/a	no

Generator Requirements					
Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
H10 SE Pad	Approx 2003	3/12/2008	no	n/a	no

g					
		2021	2022	2023	2024
		8639			
		8			
		8			
		8			
		0			

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-11	Nat. Gas	Spark	45 kW	Cummins	GG06-1641175	H160992138

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatage frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Operator Requirements

Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
G13 Supply Room	Aug-16	Jul-16	no	yes	n/a

g					
		2021	2022	2023	2024
		133.5			
		28.6			
		28.6			
		28.6			
		0			

[illegible]

OrbitalATK Clearfield Gene

Generator	Fuel	Ignition	Power	Manufacturer	Model	Serial #
GE-13	Diesel	Compressi	200 kW	Caterpillar	XQ230	G5A11678

Hours Lo

Year						
Hrs Meter						
Annual Hrs						
Maintenance						
Non-Emergency						
Emergency						

Legend:

	Total maintenance and volatege frequency deviation usage over 100 hours
	Total maintenance, voltage fequency deviation, and non-emergency usage over 100 hours
	Total non-emergency usage over 50 hours

Notes:

Generator Requirements					
Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
G13	Oct-16	Aug-20	no	no	yes

Generator Requirements					
Location	Manufacture	Date ordered	Regulatory Compliance		
			MACT ZZZZ	NSPS JJJJ	NSPS IIII
G13	Oct-16	Aug-20	no	no	yes

g					
		2021	2022	2023	2024
		5.5			
		1.8			
		1.8			
		1.8			
		0			

[illegible]

		July-21		permit limit	Augu
Individual HAP (lbs)		month	Rolling 12 aug - jul		month
ANT	Antimony	0.00	0.00		0.00
ANTC	Antimony Compounds	0.00	0.00		0.00
2NPROP	2-Nitropropane	0.00	0.00		0.00
BENZ	Benzene	0.00	0.00		0.00
1BP	1-Bromopropane	0.00	0.00		0.00
BUTOETOH	2-Butoxyethanol (removed 11-29-2004)	0.00	0.00	4000	0.00
CLBENZ	Chlorobenzene	0.00	0.00		0.00
CLFORM	Chloroform	0.00	0.00		0.00
-	Chromium compounds emitted	0.10	1.28	28	0.00
CHROMC	Chromium compounds in coatings	8.26			0.02
NECHROMC	Chromium compounds not emitted	8.16			0.02
	Chromium (elemental) emitted	0.03	0.26		0.00
CR	Chromium in coatings	2.57			0.14
NECR	Chromium not emitted	2.54			0.14
COBALT	Cobalt compounds	0.02	0.02		0.00
CRESOL	Cresol	0.00	0.00		0.00
CUM	Cumene	0.27	2.19	4000	0.10
DIOX	Dioxane	0.00	0.00		0.00
DMFORM	Dimethyl formamide	0.00	39.36		0.00
EACRY	Ethyl Acrylate	0.00	0.00	4000	0.00
EBENZ	Ethylbenzene	15.40	107.27	4000	1.94
ETHDICL	Ethylene Dichloride	0.00	0.00		0.00
ETHGLY	Ethylene Glycol	16.69	133.51	4000	8.34
FORM	Formaldehyde	0.00	0.85	1000	1.68
-	Glycol ethers (total, including 2-butoxyetha	8.22	75.33	4000	7.51
GLYETH	Glycol ethers (not specified elsewhere)	8.22			7.51
-	Hexamethylene-1,6-diisocyanate (HDI)	0.06	4.68	14	0.07
HDI	Hexamethylene-1,6-diisocyanate in mat	0.15			0.07
NEHDI	Hexamethylene-1,6-diisocyanate reacte	0.09			0.00
HEX	Hexane	0.99	3.56	4000	0.99
-	Hydrogen Fluoride emitted	0.00	0.13	20	0.00
HF	Hydrogen fluoride in materials	0.00			0.00
NEHF	Hydrogen fluoride not emitted	0.00			0.00
-	Lead emitted	0.01	0.13		0.01
LEAD	Lead in coatings	0.01			0.01
-	Lead captured	0.00			0.00
LEADC	Leaded coatings (total)	0.01	0.13		0.01
-	Maleic Anhydride emitted	0.00	0.00		0.00
MALANH	Maleic anhydride as ingredient	0.00			0.00
-	Maleic anhydride reacted	0.00			0.00
-	Methyl Methacrylate emitted	2.49	42.72	200	8.60

MMA	Methyl methacrylate (MMA) in materia	2.49			8.60
NEMMA	Methyl methacrylate reacted	0.00			0.00
-	MDA emitted	0.00	0.00	200	0.00
MDA	Methylene dianiline (MDA) in resins	0.00			0.00
NEMDA	Methylene dianiline (MDA) reacted	0.00			0.00
-	MDI emitted	0.08	1.05	20	0.01
MDI	Methylene diphenyl diisocyanate (MDI)	4.53			0.25
NEMDI	Methylene diphenyl diisocyanate (MDI)	4.45			0.23
MEOH	Methyl Alcohol	3.49	209.79	4000	3.57
MECL	Methylene Chloride	0.00	11.69	4000	0.00
MIBK	Methyl Isobutyl Ketone	11.51	533.28	4000	7.74
MEICN	Methyl Isocyanate	0.00	0.00	20	0.00
NAPTH	Napthalene	0.00	0.00	4000	0.00
NICKEL	Nickel compounds	0.97	1.10		0.18
NNDMAN	N,N-Dimethylaniline	0.47	0.47		0.00
PHENOL	Phenol	0.00	0.00	4000	0.19
R317-353	Exemptions for R317-353 (gallons)	0.00	0.00	20	0.00
-	Styrene	0.00	3.76	200	0.00
STYR	Styrene in materials	0.00			0.00
NESTYR	Styrene reacted	0.00			0.00
TCA	1,1,1-Trichloroethane	0.00	0.00	19000	0.00
3TCE	1,1,2-Trichloroethane	0.00	0.00	4000	0.00
TCE	Trichloroethylene	0.00	0.00	4000	0.00
PERC	Tetrachloroethylene (perchloroethylene)	0.00	0.17	4000	0.00
PROOX	Propylene Oxide	0.00	0.00		0.00
24TOLDIN		0.02	0.20		0.00
TOL	Toluene	15.87	138.06	4000	17.15
UTPGME	Propylene Glycol Monomethyl Ether	0.00	0.00		0.00
XYL	Xylene	48.21	581.51	4000	2.62
	Generic HAPs	1	41.29	2400	0
	HAP Total (lbs)	130	1,958.31	38000	61
	VOC (lbs)	3,948	58,494	138,000	4,020
	Natural Gas use (dthm)	8,239	155,423	406,624	6,774

st-21		September-21			October-21			Novem
Rolling 12	permit limit		Rolling 12	permit limit		Rolling 12	permit limit	
sep - aug		month	oct - sep		month	nov - oct		month
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
1.21	28	0.11	1.23	28	0.00	1.16	28	0.11
		5.62			0.23			11.95
		5.51			0.23			11.84
0.25		0.03	0.27		0.00	0.27		0.03
		1.73			0.21			4.77
		1.71			0.21			4.74
0.03		0.08	0.11		0.00	0.11		0.01
0.00		0.00	0.00		0.00	0.00		0.00
1.94	4000	0.02	1.79	4000	0.26	1.92	4000	0.25
0.00		0.00	0.00		0.00	0.00		0.00
39.36		0.00	39.36		0.00	23.62		0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
94.33	4000	1.96	87.44	4000	4.22	73.72	4000	10.18
0.00		0.00	0.00		0.00	0.00		0.00
125.17	4000	8.34	116.82	4000	16.69	116.82	4000	0.00
2.53	1000	0.00	2.53	1000	0.24	2.77	1000	0.00
78.37	4000	12.31	84.93	4000	5.04	86.01	4000	6.09
		12.31			5.04			6.09
4.29	14	0.05	2.36	14	0.08	2.25	14	0.02
		0.06			0.14			0.06
		0.00			0.06			0.04
4.54	4000	0.99	5.52	4000	0.00	4.52	4000	0.99
0.13	20	0.00	0.13	20	0.00	0.11	20	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
0.11		0.02	0.12		0.01	0.13		0.02
		0.02			0.01			0.02
		0.00			0.00			0.00
0.11		0.02	0.12		0.01	0.13		0.02
0.00		0.00	0.00		0.00	0.00		0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
43.93	200	2.66	45.97	200	1.80	46.79	200	2.00

		2.66			1.80			2.00
		0.00			0.00			0.00
0.00	200	0.00	0.00	200	0.00	0.00	200	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
1.06	20	0.07	1.13	20	0.03	1.16	20	0.58
		4.48			0.62			14.21
		4.42			0.58			13.63
200.23	4000	34.96	218.43	4000	12.41	195.49	4000	-3.43
11.69	4000	0.00	11.69	4000	0.00	11.69	4000	0.00
503.10	4000	18.40	482.43	4000	1.90	245.11	4000	33.09
0.00	20	0.00	0.00	20	0.00	0.00	20	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
1.28		4.17	5.45		0.00	5.45		0.42
0.47		0.00	0.47		0.00	0.47		0.00
0.19	4000	0.00	0.19	4000	0.00	0.19	4000	0.00
0.00	20	0.00	0.00	20	0.00	0.00	20	0.00
3.76	200	0.00	3.76	200	0.00	0.00	200	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
0.00	19000	0.00	0.00	19000	0.00	0.00	19000	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.11	4000	0.00	0.11	4000	0.00	0.00	4000	0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.20		0.00	0.17		0.07	0.22		0.00
138.36	4000	13.72	150.37	4000	9.40	133.79	4000	22.95
0.00		0.00	0.00		0.00	0.00		0.00
527.23	4000	8.49	462.84	4000	39.37	322.05	4000	33.17
41.45	2400	4	45.69	2400	0	30.00	2400	0
1,845.74	38000	110	1,790.07	38000	92	1,339.26	38000	116
56,161	138,000	3,518	53,310	138,000	4,031	51,789	138,000	4,736
154,481	406,624	8,784	154,440	406,624	10,417	155,282	406,624	11,877

ber-21		December-21			January-22			Febru:
Rolling 12	permit		Rolling 12	permit		Rolling 12	permit	
dec - nov	limit	month	jan - dec	limit	month	fab - jan	limit	month
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
1.23	28	0.01	1.15	28	0.01	1.10	28	0.00
		1.10			72.84			-2.72
		1.09			72.84			-2.72
0.29		0.00	0.29		0.00	0.28		0.00
		1.60			18.59			-0.52
		1.60			18.59			-0.52
0.12		0.00	0.12		0.02	0.14		0.00
0.00		0.00	0.00		0.00	0.00		0.00
2.09	4000	0.13	2.06	4000	0.26	2.02	4000	0.41
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
66.87	4000	12.94	71.26	4000	45.91	116.34	4000	2.65
0.00		0.00	0.00		0.00	0.00		0.00
112.65	4000	0.00	95.96	4000	4.17	100.14	4000	8.34
2.41	1000	0.00	2.40	1000	0.24	2.64	1000	0.00
86.51	4000	3.75	73.26	4000	6.22	72.78	4000	7.19
		3.75			6.22			7.19
2.09	14	0.00	1.87	14	0.09	1.75	14	0.00
		0.04			1.17			0.02
		0.03			1.08			0.02
5.50	4000	0.00	5.50	4000	0.00	5.49	4000	0.00
0.03	20	0.00	0.00	20	0.00	0.00	20	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
0.15		0.01	0.14		0.00	0.11		0.00
		0.01			0.01			0.00
		0.00			0.01			0.00
0.15		0.01	0.14		0.00	0.11		0.00
0.00		0.00	0.00		0.00	0.00		0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
48.11	200	8.36	55.57	200	2.42	56.33	200	1.24

		8.36			2.42			1.24
		0.00			0.00			0.00
0.00	200	0.00	0.00	200	0.00	0.00	200	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
1.74	20	0.01	1.74	20	0.03	1.75	20	0.01
		0.32			0.69			0.25
		0.31			0.66			0.23
182.99	4000	7.07	156.46	4000	0.18	150.54	4000	0.27
11.69	4000	0.00	0.00	4000	0.00	0.00	4000	11.69
238.18	4000	4.77	209.14	4000	22.34	217.27	4000	4.59
0.00	20	0.00	0.00	20	0.00	0.00	20	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
5.87		0.00	5.87		1.04	6.91		0.21
0.47		0.00	0.47		0.00	0.47		0.00
0.19	4000	0.00	0.19	4000	0.00	0.19	4000	0.00
0.00	20	0.00	0.00	20	0.00	0.00	20	0.00
0.00	200	0.00	0.00	200	0.00	0.00	200	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
0.00	19000	0.00	0.00	19000	0.00	0.00	19000	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.22		0.03	0.19		0.00	0.19		0.02
154.28	4000	8.68	161.14	4000	10.28	155.74	4000	31.06
0.00		0.00	0.00		0.00	0.00		0.00
288.48	4000	48.44	300.54	4000	5.46	303.50	4000	9.93
6.83	2400	0	6.78	2400	1	7.82	2400	0
1,283.07	38000	97	1,211.34	38000	136	1,290.78	38000	77
52,152	138,000	2,796	49,701	138,000	3,148	48,906	138,000	3,753
154,040	406,624	13,252	151,619	406,624	16,126	148,481	406,624	17,650

ary-22		March-22			April-22			May
Rolling 12	permit		Rolling 12	permit		Rolling 12	permit	
mar - feb	limit	month	apr - mar	limit	month	fab - jan	limit	month
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
1.10	28	0.02	0.37	28	0.01	0.37	28	0.01
		4.00			38.07			280.64
		3.98			38.07			280.62
0.28		0.01	0.09		0.00	0.09		0.00
		2.86			9.85			72.33
		2.85			9.85			72.33
0.14		0.00	0.14		0.00	0.14		0.00
0.00		0.00	0.00		0.00	0.00		0.00
2.43	4000	0.44	2.63	4000	0.09	2.42	4000	0.03
0.00		0.00	0.00		0.00	0.00		0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
118.57	4000	8.75	114.90	4000	4.35	118.27	4000	17.39
0.00		0.00	0.00		0.00	0.00		0.00
100.14	4000	12.52	100.14	4000	0.00	87.62	4000	0.00
2.40	1000	0.00	2.16	1000	0.00	2.16	1000	0.00
74.30	4000	8.60	74.05	4000	2.64	70.95	4000	0.84
		8.60			2.64			0.84
1.61	14	0.01	1.54	14	0.00	1.44	14	0.00
		0.18			0.00			0.00
		0.17			0.00			0.00
3.96	4000	0.00	3.96	4000	0.00	3.96	4000	0.00
0.00	20	0.00	0.00	20	0.00	0.00	20	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
0.11		0.01	0.11		0.02	0.12		0.00
		0.01			0.02			0.02
		0.00			0.00			0.02
0.11		0.01	0.11		0.02	0.12		0.00
0.00		0.00	0.00		0.00	0.00		0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
56.12	200	3.18	51.22	200	9.70	59.47	200	2.07

		3.18			9.70			2.07
		0.00			0.00			0.00
0.00	200	0.00	0.00	200	0.00	0.00	200	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
1.71	20	0.02	0.90	20	0.04	0.91	20	0.04
		1.10			0.94			1.11
		1.08			0.89			1.07
145.73	4000	20.17	137.74	4000	7.13	141.01	4000	9.83
11.69	4000	0.00	11.69	4000	0.00	11.69	4000	0.00
218.82	4000	5.23	136.80	4000	14.77	140.72	4000	67.41
0.00	20	0.00	0.00	20	0.00	0.00	20	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
7.12		0.00	7.12		0.07	7.19		0.10
0.47		0.00	0.47		0.00	0.47		0.00
0.19	4000	0.00	0.19	4000	0.00	0.19	4000	0.00
0.00	20	0.00	0.00	20	0.00	0.00	20	0.00
0.00	200	0.00	0.00	200	0.00	0.00	200	0.00
		0.00			0.00			0.00
		0.00			0.00			0.00
0.00	19000	0.00	0.00	19000	0.00	0.00	19000	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00	4000	0.00	0.00	4000	0.00	0.00	4000	0.00
0.00		0.00	0.00		0.00	0.00		0.00
0.20		0.07	0.27		0.00	0.27		0.00
170.61	4000	23.28	179.97	4000	25.82	202.20	4000	37.11
0.00		0.00	0.00		0.00	0.00		0.00
312.21	4000	53.56	280.29	4000	18.05	295.33	4000	70.89
8.04	2400	0	8.11	2400	0	8.19	2400	0
1,318.49	38000	142	1,180.85	38000	102	1,232.50	38000	350
48,937	138,000	4,663	47,428	138,000	4,444	48,788	138,000	3,273
146,966	406,624	16,153	145,443	406,624	13,955	143,735	406,624	11,576

1-22		June-22		
Rolling 12	permit		Rolling 12	permit
mar - feb	limit	month	apr - mar	limit
0.00		0.00	0.00	
0.00		0.00	0.00	
0.00		0.00	0.00	
0.00		0.00	0.00	
0.00		0.00	0.00	
0.00	4000	0.00	0.00	4000
0.00		0.00	0.00	
0.00		0.00	0.00	
0.38	28	0.01	0.37	28
		3.09		
		3.09		
0.10		0.00	0.09	
		0.77		
		0.77		
0.15		0.01	0.15	
0.00		0.00	0.00	
2.33	4000	0.06	2.32	4000
0.00		0.00	0.00	
0.00		0.00	0.00	
0.00	4000	0.00	0.00	4000
126.99	4000	8.08	133.77	4000
0.00		0.00	0.00	
83.45	4000	0.00	75.10	4000
2.16	1000	0.00	2.16	1000
70.33	4000	1.83	70.24	4000
		1.83		
0.82	14	0.01	0.40	14
		0.07		
		0.07		
3.96	4000	0.00	3.96	4000
0.00	20	0.00	0.00	20
		0.00		
		0.00		
0.12		0.01	0.12	
		0.01		
		0.00		
0.12		0.01	0.12	
0.00		0.00	0.00	
		0.00		
		0.00		
52.39	200	2.00	46.52	200

		2.00		
		0.00		
0.00	200	0.00	0.00	200
		0.00		
		0.00		
0.95	20	0.02	0.93	20
		0.44		
		0.43		
122.81	4000	0.52	96.16	4000
11.69	4000	0.00	11.69	4000
205.14	4000	11.25	202.98	4000
0.00	20	0.00	0.00	20
0.00	4000	0.00	0.00	4000
7.28		0.36	7.52	
0.47		0.47	0.94	
0.19	4000	0.00	0.19	4000
0.00	20	0.00	0.00	20
0.00	200	0.00	0.00	200
		0.00		
		0.00		
0.00	19000	0.00	0.00	19000
0.00	4000	0.00	0.00	4000
0.00	4000	0.00	0.00	4000
0.00	4000	0.00	0.00	4000
0.00		0.00	0.00	
0.27		0.07	0.29	
227.62	4000	16.11	231.42	4000
0.00		0.00	0.00	
343.42	4000	29.17	367.36	4000
8.29	2400	1	9.02	2400
1,492.94	38000	72	1,484.54	38000
47,158	138,000	2,428	44,759	138,000
144,016	406,624	10,096	144,898	406,624



INVOICE

Page 1 of 1

Remit Payment to:
RelaDyne West LLC
PO Box 954039
St Louis, MO 63195-4039

Invoice Number: 0866341-IN
Invoice Date: 08/02/2022
Invoice Due Date: 08/12/2022
Order Number: 0866341
Order Date: 08/01/2022
Salesperson: LANDON HYER

Payments not received by the due date will be assessed interest at a rate of 1.50% per month.
There will be a 3% processing fee added to the total invoice balance at the time of processing for all Credit Card Payments.

Bill To: 31-0015846

ATK/NORTHROP GRUMMAN
FINANCIAL SHARED SERVICES AP
5600 AMERICAN BLVD STE 200
MINNEAPOLIS, MN 55437

Ship To: 0010

TW ATK - PROMONTORY - DYED
AST 20K DYE / 500 DYE / 24-2
PROMONTORY, UT 84302

Customer P.O.	Warehouse	Truck	Driver	Terms	Comment				
MP00200912	C25	143772A	81	NET 10 DAYS					
Item Description	Item Number	Supplier#:	UOM	Ordered	Shipped	BackOrder	Unit Price	Amount	
DYED #2 ULTRA LOW SULFUR DSL	228	228	GAL	4,500.00	3,300.00		4.219900	13,925.67	
FEDERAL LUST FEE - DSL						0.00100		3.30	
FEDERAL ENV FEE - DSL						0.00214		7.06	
UT STATE ENV SURCHARGE - DSL						0.00650		21.45	
Item Total:						4.22954		13,957.48	

Save Time!
Go online to manage your account, place orders, access signed delivery tickets, and more!
Sign up today at my.RelaDyne.com

Net Invoice: 13,957.48
Fuel Surcharge: 0.00
Handling Fee: 0.00
Sales Tax: 0.00
Invoice Total: 13,957.48



DELIVERY TICKET

BRIGHAM CITY
1015 W FOREST ST
BRIGHAM CITY, UT 84302INT
Phone: 435-279-4949 Fax:

Order Number: **0866341**

Order Date: 08/01/2022
 Salesperson: LONDON HYER
 Cust Serv Rep: STEVE STEVENS
 Delivery Date: **8/2/22**

BOL #: Terminal: **Sold To: 31-0015846**

ATK/NORTHROP GRUMMAN
 FINANCIAL SHARED SERVICES AP
 5600 AMERICAN BLVD STE 200
 MINNEAPOLIS, MN 55437
 (801) 251-5911

Ship To: 0010

TW ATK - PROMONTORY - DYED
 AST 20K DYE / 500 DYE / 24-2
 PROMONTORY, UT 84302

Ordered By:

Comment:

SHIP DATE: 8/2/2022

Customer P.O.	Truck	Driver	Terms	Whse	Buyback #
MP00200912	143772A	KENNY RHODES-BRIGHAM	NET 10 DAYS	C25	

HM	Description	Item #	Supplier #	UOM	Ordered	Shipped	BackOrder
----	-------------	--------	------------	-----	---------	---------	-----------

X	NA1993, DIESEL FUEL, 3, III			GAL	4,500.00		
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228
 DYED #2 ULS DSL 15PPM

THIS PRODUCT IS DYED DIESEL FUEL, NON-TAXABLE
 USE ONLY. PENALTY FOR TAXABLE USE: OFF HWY/
 HWY/NOT LEGAL FOR HWY USE.

INCHES BEFORE _____ AFTER _____ BPNE

M-205 - 2806**T-15 - 500**

Customer Signature

Date

Print Customer Name

Driver Signature

Time In

Time Out

of Drums Returned

EMERGENCY RESPONSE: 1-800-535-5053 (INFO-TRAC)
IN CASE OF FIRE, SPILLS, LEAKS OR ACCIDENT WITH
HAZARDOUS MATERIALS DURING DELIVERY