



Application for a State Waste Discharge Permit to Discharge Industrial Wastewater to Ground Water by Land Treatment or Application

This application is for a state waste discharge permit as required by Chapter 90.48 RCW and Chapter 173-216 WAC. Permit applications provide Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, the flow characteristics of the discharge, and the site characteristics at the point of discharge.

Ecology may request additional information to clarify the conditions of this discharge. The applicant should reference information previously submitted to Ecology that applies to this application in the appropriate section.

SECTION A. GENERAL INFORMATION

1. Applicant name: Stoke Space Technologies
2. Facility name:
(if different from applicant) _____
3. Applicant mail address: 19241 82nd Avenue South
Street
Kent, Washington 98032
City/State Zip
4. Facility location address:
(if different from above) 8005 Road G Northeast
Street
Moses Lake, Washington 98837
City/State Zip
5. UBI No. 604-530-831 Sometimes called a registration, tax, "C," or resale number, the Unified Business Identifier (UBI) number is a nine-digit number used to identify persons engaging in business activities. The number is assigned when a person completes a [Master Business Application](#) to register with or obtain a license from state agencies. The Departments of Revenue, Licensing, Employment Security, Labor and Industries, and the Corporations Division of the Secretary of State are among the state agencies participating in the UBI program.
6. *Latitude/longitude of the processing facility as decimal degrees (NAD83/WGS84):*
47.20496 / -119.34154

FOR ECOLOGY USE ONLY

Check One

New/Renewal ☐

Modification ☐

Date application received

Application/Permit no.

Date application accepted

Date fee paid

7. Person to contact who is familiar with the information contained in this application:

_____ Name	_____ Title
_____ Telephone number	_____ Fax number

8. Check One:

☐ **Permit renewal** (including renewal of temporary permits authorized by RCW 90.48.200)

Does this application request a greater amount of wastewater discharge, a greater amount of pollutant discharge, or a discharge of different pollutants than specified in the last permit application for this facility? ☐ YES ☐ NO

For permit renewals, the current permit is an attachment, by reference, to this application.

☐ **Permit modification**

☐ **Existing
unpermitted discharge**

☒ **Proposed discharge**

Anticipated date of discharge: 7/1/2022

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment for knowing violations.

Thomas Feldman

Signature*

4/26/2022

Date

CTO

Title

Thomas Feldman

Printed name

*Applications must be signed as follows: Corporations, by a principal executive officer of at least the level of vice-president; partnership, by a general partner; sole proprietorship, by the proprietor. If these titles do not apply to your organization, the person who makes budget decisions for this facility must sign the application.

The application signatory may delegate signature authority for submittals required by the permit, such as monthly reports, to a suitable employee. You can delegate this authority to a qualified individual or to a position, which you expect to fill with a qualified individual. If you wish to delegate signature authority, please complete the following:

_____ Signature of delegated employee	_____ Date	_____ Title or function at the facility
_____ Printed name		

SECTION B. PRODUCT INFORMATION

- Briefly describe all manufacturing processes and products, and/or commercial activities at this facility. Provide the applicable Standard Industrial Category (SIC) and the North American Industry Classification System (NAICS) Code(s) for each activity (see *North American Industrial Classification System*, 2007 ed.). You can find the 1997 NAICS codes and the corresponding 1987 Standard Industry Category (SIC) codes at (<http://www.census.gov/epcd/naics/frames3.htm>).

Description:

Stoke Space Technologies plans to operate a rocket engine testing facility in Moses Lake, Washington under SIC 9661 and NAICS 927110 which are both categorized as Space Research and Technology. This facility plans to operate 5 days per week 365 days per year.

Water will be used to cool the exhaust from the rocket engine and concrete pad beneath the rocket engine test stand. The cooling water will be collected in a sump, and routed to a 6,000 gallon vault, tested for water quality, and discharged to a drywell located near the testing pad. The facility plans to have no discharge starting in early 2023 once a cooling water recirculation system is installed, which will recirculate and reuse cooling water generated from the operation.

- List raw materials and products:

Type	RAW MATERIALS	Quantity
<i>Potatoes (Example)</i>		<i>20 million tons per year</i>
n/a	n/a	
Type	PRODUCTS	Quantity
<i>French fries (Example)</i>		<i>10 million pounds per year</i>
n/a	n/a	

SECTION C. PLANT OPERATIONAL CHARACTERISTICS

1. For each process listed in B.1 that generates wastewater, list the process, assign the waste stream a name and ID #, and describe whether it is a batch or continuous flow.

Process	Waste Stream Name	Waste Stream ID#	Batch (B) or Continuous (C) Process
<i>Receiving raw potatoes (Example)</i>	<i>Mud Water</i>	<i>1</i>	<i>C</i>
Exhaust & Concrete Pad Cooling	Cooling Water	1	B

2. On a separate sheet, produce a schematic drawing showing production processes and water flow through the facility and wastewater treatment devices (*label as attachment C2*). The drawing should indicate the source of intake water and the operations contributing wastewater to the effluent and should label the treatment units. Construct the water balance by showing average flows between intakes, operations, treatment units, and points of discharge to land. If a water balance cannot be determined (*e.g., for certain mining activities*), provide a description of the nature and amount of any sources of water and any collection or treatment measures.
3. What is the highest daily discharge flow from the processing facility: 543.75 gallons per day
(Specify the time period for the value given)
- What is the highest daily discharge flow to the sprayfields/infiltration basin: n/a inches/acre/month OR
(Specify the time period for the value given) 543.75 gallons per day to the dry well
- What is the highest average monthly discharge flow (daily flows averaged over a month) from the processing facility: 543.75 gallons/day?
(Specify the time period for the value given)
- What is the highest average monthly discharge flow to the sprayfields: n/a inches/acre/month OR
(Specify the time period for the value given) n/a gallons per day
4. Describe any planned wastewater treatment or sprayfield/infiltration improvements and the schedule for the improvements or changes. (*Use additional sheets, if necessary and label as attachment C4.*)

Stoke Space Technologies plans to install a cooling water recycle/recirculation system which is scheduled to be online in early 2023. After this system is installed, the facility plans to recycle/recirculate 100% of the water used on site, which will result in no wastewater generated at the facility.

5. If production processes are subject to seasonal variations, provide the following information. List discharge for each wastestream in gallons or million gallons per month. The combined value for each month should equal the estimated total monthly flow. Please indicate the proper unit by checking one of the following boxes:

☒ gallons per day ☐ gallons per month ☐ million gallons per month

Waste Stream ID#	MONTHS											
	J	F	M	A	M	J	J	A	S	O	N	D
#1 (Example)	1000	1000	1000	1000	6000	2000	2000	2000	1000	1000	5000	4000
#1 (Cooling Water)	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75
Estimated total gallons	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75	543.75

6. If this is a discharge from the processing facility to a storage or evaporative lagoon, what is the size of the lagoon (give square footage for the bottom of the lagoon and the total volume of the lagoon at full operating depth). 10,000 square feet; 10 million gallons (Example)

n/a

7. Check the applicable box. Is this a discharge to a sprayfield ☐ or an infiltration bed ☒? Provide the average gallons per acre per day proposed for each month in the following table.

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct	Nov	Dec
Estimated gallons per acre per day	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

n/a since the facility proposes to discharge to a drywell

8. How many hours a day does this facility typically operate? 12
 How many days a week does this facility typically operate? 5
 How many weeks per year does this facility typically operate? 52

9. List all incidental materials such as oil, paint, grease, solvents, and cleaners that are used or stored on site (list only those with quantities greater than 10 gallons for liquids and 50 pound quantities for solids). For solvents and solvent-based cleaners, include a copy of the material safety data sheet for each material and estimate the quantity used. *Use additional sheets, if necessary and label as attachment C.7.)*

Oil, paint, grease, solvents, or cleaners are not stored onsite above quantities greater than 10 gallons for liquids and 50 pound quantities for solids.

Materials/Quantity Stored: n/a

- | | | Yes | No |
|-----|---|--------------------------|-------------------------------------|
| 10. | Some types of facilities are required to have spill or waste control plans. Does this facility have: | | |
| a. | A spill prevention, control, and countermeasure plan (40 CFR 112)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | An Oil Spill Contingency Plan (chapter 173-182 WAC)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. | An emergency response plan (per WAC 173-303-350)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. | A runoff, spillage, or leak control plan (per WAC 173-216-110(f))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. | Any spill or pollution prevention plan required by local, state or federal authorities? If yes specify: _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. | A solid waste control plan? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

This page purposely left blank

SECTION E. WASTEWATER INFORMATION

1. How are the water intake and effluent flows measured?

Intake: **Metered**

Effluent **Metered**

2. Describe the collection method for the samples analyzed below. (*i.e.*, grab, 24-hour composite). Applicants must collect grab samples (not composites) for analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and Enterococci (previously known as fecal streptococcus at § 122.26 (d)(2)(iii)(A)(3)), or volatile organics.

Grab samples will be conducted at the Cooling Water Storage Vault or catch basin prior to discharging to a dry well.

3. Has the effluent been analyzed for any other parameters than those identified in question E.4.? ☐ YES ☒ NO
If yes, attach results and label as attachment E.4. This data must clearly show the date, method and location of sampling. (*Note: Ecology may require additional testing.*)

4. Provide measurements or range of measurements for treated wastewater prior to discharge to the POTW for the parameters with an “X” in the left column. If you obtain the application from the internet, contact Ecology’s regional office to see if testing for a subset of these parameters is permissible. All analyses (except pH) must be conducted by a laboratory registered or accredited by Ecology (WAC 173-216-125). If this is an application for permit renewal, provide data for the last year for those parameters that are routinely measured. For parameters measured only for this application, place the values under “Maximum.” Report the values with units as specified in the parameter name or in the detection level.

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table unless Ecology approves an alternate method **or the method used produces measurable results in the sample and EPA has listed it as an EPA approved method in 40 CFR Part 136. If the Permittee uses an alternative method as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.**

The values listed in the table below include estimated values for certain parameters along with lab results for the incoming cooling water supplied by the City of Moses Lake. The lab report is attached.

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 th , 20 th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	BOD (5 day)					SM 5210 B	/2 mg/l
	COD					SM 5220 D	/10 mg/l
	Total suspended solids					SM 2540 D	/5 mg/l
	Fixed Dissolved Solids					SM 2540 E	
x	Total dissolved solids			323	1	SM 2540 C	
	Conductivity (micromhos/cm)					SM 2510 B	
	Ammonia-N as N					SM 4500-NH ₃ C	/0.3 mg/L
x	pH	6.5	8.5	7.36	1	SM 4500-H	0.1 standard units
	Fecal coliform (organisms/100 mL)					SM 9221 E or 9222 D	
	Total coliform (organisms/100 mL)					SM 9221 B or 9222 B	
	Dissolved oxygen					SM 4500-O C/G	
x	Nitrate + nitrite-N as N			1.1	1	SM 4500-NO₃-E	100 µg/L
	Total kjeldahl N as N					SM 4500-N _{org} C/E/FG	300 µg/l
	Ortho-phosphate-P as P					SM 4500-P E/F	10 µg/l
	Total-phosphorous-P as P					SM 4500-P E/P/F	10 µg/l
	Total Oil & grease					EPA 1664A	1.4/5 mg/l
	NWTPH - Dx					Ecology NWTPH Dx	250/250 µg/l
	NWTPH - Gx					Ecology NWTPH Gx	250/250 µg/l
	Calcium					EPA 200.7	10 µg/l
x	Chloride			8.3	1	SM 4500-CLC	0.15 µg/l
x	Fluoride			0.5 U	1	SM 4500-FE	0.25/0.1 mg/l
	Magnesium					EPA 200.7	10/50 µg/l
	Potassium			7.0	1	EPA 200.7	700/ µg/l
	Sodium			19	1	EPA 200.7	29/ µg/l
x	Sulfate			19	1	SM 4500-SO₄-C/D	/200 µg/l
x	Alkalinity as CaCO ₃			180	1	SM 2320-B	/5 mg/L as CaCO₃

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 th , 20 th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
X	Arsenic (total)			0.0035	1	EPA 200.8	0.1/0.5 µg/l
	Barium (total)					EPA 200.8	0.5/2 µg/l
X	Cadmium (total)			0.0004 U	1	EPA 200.8	.05/.25 µg/l
X	Chromium (total)			0.0008 U	1	EPA 200.8	0.2/1 µg/l
X	Copper (total)			0.0025	1	EPA 200.8	0.4/2 µg/l
X	Iron (total)			0.1 U	1	EPA 200.7	12.5/50 µg/l
X	Lead (total)			0.0004 U	1	EPA 200.8	0.1/.5 µg/l
X	Manganese (total)			0.002 U	1	EPA 200.8	0.1/0.5 µg/l
X	Mercury (total) pg/L			0.0002 U	1	EPA 1631E	0.2/0.5 pg/l
	Molybdenum (total)					EPA 200.8	0.1/0.5 µg/l
	Nickel (total)					EPA 200.8	0.1/0.5 µg/l
X	Selenium (total)			0.008 U	1	EPA 200.8	1/1 µg/l
X	Silver (total)			0.0004 U	1	EPA 200.8	.04/.2 µg/l
X	Zinc (total)			0.007 U	1	EPA 200.8	0.5/2.5 µg/l

Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.

Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to (1, 2, or 5) x 10ⁿ, where n is an integer. (64 FR 30417).

ALSO GIVEN AS:

The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit. All measurement values except for pH are in mg/L.

The analytical methods used by the lab may be different from the listed analytical methods in the table above. The analytical methods used for each parameter is shown in the attached lab report and Summary Table (Table 1)

This page purposely left blank

5. Does this facility use any of the following chemicals as raw materials in production, produce them as part of the manufacturing process, or are they present in the wastewater? (*The number following the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.*) ☐ YES ☒ NO

If yes, specify how the chemical is used and the quantity used or produced (*Use additional sheets, if necessary and label as attachment E5.*):

Acrylamide/79-06-1
 Acrylonitrile/107-13-1
 Aldrin/309-00-2
 Aniline/62-53-3
 Aramite/140-57-8
 Arsenic/7440-38-2
 Azobenzene/103-33-3
 Benzene/71-43-2
 Benzidine/92-87-5
 Benzo(a)pyrene/50-32-8
 Benzotrichloride/98-07-7
 Benzyl chloride/100-44-7
 Bis(chloroethyl)ether/111-44-4
 Bis(chloromethyl)ether/542-88-1
 Bis(2-ethylhexyl) phthalate/ 117-81-7
 Bromodichloromethane/75-27-4
 Bromoform/75-25-2
 Carbazole/86-74-8
 Carbon tetrachloride/56-23-5
 Chlordane/57-74-9
 Chlorodibromomethane/124-48-1
 Chloroform/67-66-3
 Chlorthalonil/1897-45-6
 2,4-D/94-75-7
 DDT/50-29-3
 Diallate/2303-16-4
 1,2 Dibromoethane/106-93-4
 1,4 Dichlorobenzene/106-46-7
 3,3' Dichlorobenzidine/91-94-1
 1,1 Dichloroethane/75-34-3
 1,2 Dichloroethane/107-06-2

Nitrofurazone/59-87-0
 N-nitrosodiethanolamine/ 1116-54-7
 N-nitrosodiethylamine/55-18-5
 N-nitrosodimethylamine/62-75-9
 N-nitrosodiphenylamine/86-30-6
 N-nitroso-di-n-propylamine/ 621-64-7
 N-nitrosopyrrolidine/930-55-2
 N-nitroso-di-n-butylamine/ 924-16-3
 N-nitroso-n-methylethylamine/
 10595-95-6
 PAH/NA
 PBBs/NA
 PCBs/1336-36-3
 1,2 Dichloropropane/78-87-5
 1,3 Dichloropropene/542-75-6
 Dichlorvos/62-73-7
 Dieldrin/60-57-1
 3,3' Dimethoxybenzidine/119-90-4
 3,3 Dimethylbenzidine/119-93-7
 1,2 Dimethylhydrazine/540-73-8
 2,4 Dinitrotoluene/121-14-2
 2,6 Dinitrotoluene/606-20-2
 1,4 Dioxane/123-91-1
 1,2 Diphenylhydrazine/122-66-7
 Endrin/72-20-8
 Epichlorohydrin/106-89-8
 Ethyl acrylate/140-88-5
 Ethylene dibromide/106-93-4
 Ethylene thiourea/96-45-7
 Folpet/133-07-3
 Fumecyclohex/60568-05-0

Heptachlor/76-44-8
 Heptachlor epoxide/1024-57-3
 Hexachlorobenzene/118-74-1
 Hexachlorocyclohexane (alpha)/
 319-84-6
 Hexachlorocyclohexane (tech.)/
 608-73-1
 Hexachlorodibenzo-p-dioxin,
 mix/19408-74-3
 Hydrazine/hydrazine sulfate/ 302-01-2
 Lindane/58-89-9
 2 Methylaniline/100-61-8
 2 Methylaniline hydrochloride/
 636-21-5
 4,4' Methylene bis(N,N-
 dimethyl)aniline/101-61-1
 Methylene chloride
 (dichloromethane)/75-09-2
 Mirex/2385-85-5
 O-phenylenediamine/106-50-3
 Propylene oxide/75-56-9
 2,3,7,8-Tetrachlorodibenzo-p-dioxin/
 1746-01-6
 Tetrachloroethylene/127-18-4
 2,4 Toluenediamine/95-80-7
 o-Toluidine/95-53-4
 Toxaphene/8001-35-2
 Trichloroethylene/79-01-6
 2,4,6-Trichlorophenol/88-06-2
 Trimethyl phosphate/512-56-1
 Vinyl chloride/75-01-4

6. Are any other pesticides, herbicides, or fungicides used at this facility? ☐ YES ☒ NO

If yes, specify the material and quantity used.

7. Are there other pollutants that you know of or believe to be present? ☐ YES ☒ NO

If yes, specify the pollutants and their concentration if known
(attach laboratory analyses if available).

☐ DON'T KNOW

SECTION F. GROUND WATER INFORMATION

Provide available data measurements or range of measurements from monitoring wells or supply wells in the area of discharge. Provide the analytical method and detection limit, if known. Provide the location of each well on the map required in G.3 below. Attach well logs when available. Copy this page as necessary for each well. Provide the latitude and longitude in decimal format.

Ecology Well Tag ID # AEL 369Well ID # LA-MW1 (*example MW-1*)*(example AAB123)*Latitude: 47.21722Longitude: -119.338889

Well Elevation (to the nearest 0.01 feet) n/a Check the appropriate box; the elevation measurement is relative to: the NAVD88 standard ☐ mean sea level ☐

Parameter	Units	Range of Measurements*	Number of Analyses	Analytical Method	Detection Limit
BOD (5 day)	mg/L				
COD	mg/L				
Total organic carbon	mg/L				
Total dissolved solids	mg/L	252 - 415	65	SM2540C	1
Dissolved Fixed Solids	mg/L				
pH	Standard units	6.4 - 7.8	65	SM 2540C	n/a
Conductivity	(micromhos/cm)	324 - 432	65	SM4500H	n/a
Alkalinity	mg/L as CaCO ₃	107 - 137	65	SM2320 B(4a)	1.0
Total hardness	mg/L				
Fecal coliform	organisms/100mL				
Total coliform	organisms/100mL				
Dissolved oxygen	mg/L				
Ammonia-N	mg/L				
Nitrate + nitrite-N, nitrate as N	mg/L	5.0 - 6.7	65	SM4500 NO2	n/a
Total kjeldahl N as N	mg/L	0.45 - 1.28	30	SM4500-NorgB	0.25
Ortho-phosphate-P as P	mg/L				
Total-phosphate-P as P	mg/L				
Total Oil and Grease	mg/L				
Total petroleum hydrocarbon	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Calcium	<input checked="" type="checkbox"/> mg/L <input type="checkbox"/> µg/l	17.6 - 31.1	30	EPA200.7	0.20
Chloride	<input checked="" type="checkbox"/> mg/L <input type="checkbox"/> µg/l	6.2 - 14.5	65	SM4500 Cl B	0.42
Fluoride	<input checked="" type="checkbox"/> mg/L <input type="checkbox"/> µg/l	0.30 - 0.45	65	SM4500F C	0.01
Magnesium	<input checked="" type="checkbox"/> mg/L <input type="checkbox"/> µg/l	8.6 - 10.8	65	EPA200.7	0.02
Potassium	<input checked="" type="checkbox"/> mg/L <input type="checkbox"/> µg/l	1.7 - 4.2	65	EPA200.7	0.10
Sodium	<input checked="" type="checkbox"/> mg/L <input type="checkbox"/> µg/l	22.2 - 38.4	65	EPA200.7	0.03
Sulfate	<input checked="" type="checkbox"/> mg/L <input type="checkbox"/> µg/l	8.0 - 14.7	65	SM4500 SO4C	0.78
Barium	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Cadmium	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Chromium	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Copper	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Iron	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Lead	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Manganese	<input type="checkbox"/> mg/L <input checked="" type="checkbox"/> µg/l	0.27 - 1112	n/a	EPA200.5	0.27

Parameter	Units	Range of Measurements	Number of Analyses	Analytical Method	Detection Limit
Mercury	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Selenium	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Silver	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Zinc	<input type="checkbox"/> mg/L <input type="checkbox"/> µg/l				
Depth to water level (to the nearest .01 feet)		98.11 - 112.67	64	Tape	0.01

****Information based on Port of Moses 2015 Applicaton for State Waste Discharge P"ermit - Modification***

SECTION G. SITE ASSESSMENT

The local library and local city or county planning offices may be helpful in providing the information required in this section. You may consult the Department of Ecology Water Resources Program to help identify wells within one mile of your site.

- 1. Land Application Sites: Provide the information below for each land application site. Provide the latitude/longitude (approximate center of the site; NAD83/WGS84 reference datum.) Attach a copy of the contract(s) authorizing use of any private land(s) used for each treatment site. Add table rows as necessary.

Legal Description (section/township/range)		POR SECTIONS 15, 17,20, 21, 22, 28, 29, 32, 33, Township 20, Range 28	
Latitude	Longitude	Acreage	Owner
47.206034	-119.337900	Not applicable (drywell)	Port District #10 (Port of Moses Lake)
Legal Description (section/township/range)			
Latitude	Longitude	Acreage	Owner
Legal Description (section/township/range)			
Latitude	Longitude	Acreage	Owner
Legal Description (section/township/range)			
Latitude	Longitude	Acreage	Owner

- 2. If this is a new discharge, list all environmental control permits or approvals needed for this project; for example, SEPA review, engineering reports, hydrogeologic reports, , , or air emissions permits.

The Port of Moses Lake (lead agency for the project) Determination of Non-Significance, December 6, 2021
Engineering Design Report, Stoke Aerospace (Landau Associates, 2022)

3. Attach an original United States Geological Survey (USGS) 7.5 minute topographic map and aerial photograph(s) from an internet mapping site that shows the processing facility and sprayfield site(s). **USGS topographical maps are available from the Department of Natural Resources (360 902-1234), Metsker Maps (206 588-5222), some local bookstores, and internet sites.** Show the following on this map:
 - a. Location and name of internal and adjacent streets.
 - b. Surface water drainage systems within ¼ mile of the site.
 - c. All wells within 1 mile of the site.
 - d. Wastewater discharge points.
 - e. Land uses and zoning adjacent to the wastewater application site.
 - f. Groundwater gradient.
4. Describe the soils on the site using information from local soil survey reports. **Soils information is available from your local County Conservation District or from information contained in the sites hydrogeologic report.** *(Submit on separate sheet and label as attachment G.4.)*
5. Describe the local geology and hydrogeology within one mile of the site. Include any groundwater quality data. **The local library or local Soil Conservation Service may have this information.** *(Submit on separate sheet and label as attachment G.5.)*
6. List the names and addresses of contractors or consultants who provided information and cite sources of information by title and author.

Soil and hydrogeologic information are covered and referenced in the Engineering Design Report.

SECTION H. STORMWATER

1. Do you have coverage under the Washington State Industrial Stormwater NPDES General permit? ☐ YES ☒ NO
If yes, please list the permit number here. _____

If no, have you applied for coverage under the Washington State Industrial Stormwater NPDES general permit? ☐ YES ☒ NO

Note: If you answered "no" to both questions above, complete the following questions 2 through 8.

2. Describe the size of the stormwater collection area. All industrial activities (rocket engine testing) occurs over concrete. Stormwater collected on the concrete pad are directed to drywells located near the concrete pad.
- a. Unpaved area n/a sq.ft.
- b. Paved area 4,000 sq.ft.
- c. Other collection areas (roofs) n/a sq.ft.
3. Does your facility's stormwater discharge to: *(Check all that apply)*
- ☐ Storm sewer system; name of storm sewer system *(operator)*:
- ☐ Sanitary sewer
- ☐ Directly to surface waters of Washington State *(e.g., river, lake, creek, estuary, ocean)*.
Specify waterbody name _____
- ☐ Indirectly to surface waters of Washington State *(i.e., flows over adjacent properties first)*.
- ☐ Directly to ground waters of Washington State via:
- ☒ Dry well within grassy swales
- ☐ Drainfield
- ☐ Other
4. Areas with industrial activities at facility: *(check all that apply)*
- ☐ Manufacturing building
- ☐ Material handling
- ☐ Material storage
- ☐ Hazardous waste treatment, storage, or disposal *(refers to RCRA, Subtitle C facilities only)*
- ☐ Waste treatment, storage, or disposal
- ☐ Application or disposal of wastewaters
- ☐ Storage and maintenance of material handling equipment
- ☐ Vehicle maintenance
- ☐ Areas where significant materials remain
- ☐ Access roads and rail lines for shipping and receiving
- ☒ Other Rocket engine testing area (testing occurs over concrete)

5. Material handling/management practices

a. Types of materials handled and/or stored outdoors: *(check all that apply)*

- | | |
|---|--|
| <input type="checkbox"/> <input type="checkbox"/> Solvents | <input type="checkbox"/> <input type="checkbox"/> Hazardous wastes |
| <input type="checkbox"/> <input type="checkbox"/> Scrap metal | <input type="checkbox"/> <input type="checkbox"/> Acids or alkalies |
| <input type="checkbox"/> <input type="checkbox"/> Petroleum or petrochemical products | <input type="checkbox"/> <input type="checkbox"/> Paints/coatings |
| <input type="checkbox"/> <input type="checkbox"/> Plating products | <input type="checkbox"/> <input type="checkbox"/> Woodtreating products |
| <input type="checkbox"/> <input type="checkbox"/> Pesticides | <input type="checkbox"/> <input type="checkbox"/> Other <i>(please list)</i> : _____ |

b. Identify existing management practices employed to reduce pollutants in industrial storm water discharges: *(check all that apply)*

- | | | |
|---|--|--|
| <input type="checkbox"/> <input type="checkbox"/> Oil/water separator | <input checked="" type="checkbox"/> <input type="checkbox"/> Detention facilities | |
| <input checked="" type="checkbox"/> <input type="checkbox"/> Containment | <input checked="" type="checkbox"/> <input type="checkbox"/> Infiltration basins | Drywells are placed within grassy swales |
| <input type="checkbox"/> <input type="checkbox"/> Spill prevention | <input type="checkbox"/> <input type="checkbox"/> Operational BMPs | |
| <input type="checkbox"/> <input type="checkbox"/> Surface leachate collection | <input type="checkbox"/> <input type="checkbox"/> Vegetation management | |
| <input type="checkbox"/> <input type="checkbox"/> Overhead coverage | <input type="checkbox"/> <input type="checkbox"/> Other <i>(please list)</i> : _____ | |

6. Attach a map showing stormwater drainage/collection areas, disposal areas and discharge points. This may be a hand drawn map if no other site map is available. Label this as attachment H.8.

SECTION I. OTHER INFORMATION

1. Describe liquid or solid wastes generated that are not disposed of in the waste stream(s) and describe the method of disposal. For each type of waste, provide type of waste, name, address, and phone number of hauler.

Liquid or solid waste will not be generated from the rocket engine testing operations.

2. Describe any storage areas used for raw materials, products, and wastes.

n/a

Summary of attachments that may be required for this application:

(Please check those attachments that are included)

- ☒ C.2. Production schematic flow diagram and water balance
- ☐ C.4. Wastewater treatment improvements
- ☐ C.7. Additional incidental materials
- ☐ E.4. Additional results of effluent testing
- ☐ G.1. Copies of land use contracts
- ☒ G.3. USGS topographical map
- ☒ G.4. Soils description
- ☒ G.5. Local geology and hydrology
- ☒ H.8. Stormwater drainage map

The engineering report (submitted with the application) includes additional information included in the attachments listed above.

If you need this document in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.