



Application for a State Waste Discharge Permit to Discharge Industrial Wastewater to a Publicly-Owned Treatment Works (POTW)

This application is for a state waste discharge permit for a discharge of industrial wastewater to a publicly-owned treatment works (POTW) as required by Chapter 90.48 RCW and Chapter 173-216 WAC. It is designed to provide Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, and the flow characteristics of the 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: REC Solar Grade Silicon, Inc.
2. Facility Name: same
(if different from Applicant)
3. Applicant Mail Address: 3322 Road "N" NE
Street
Moses Lake, WA City/State 98837 Zip
4. Facility Location Address: same
(if different from 3 above) Street
City/State Zip
5. UBI No. 602-313-434
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 facility as decimal degrees (NAD83/WGS84):
47.135556 °N / 119.200000 °W

FOR OFFICE USE ONLY		Check One:		New/Renewal <input type="checkbox"/>	Modification <input type="checkbox"/>
Date Application Received _____	Date Fee Paid _____	Application/ Permit No. _____	Date Application Accepted _____		

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

Paul Stenhouse

Name

Environmental Engineer

Title

(509) 793-9165

Telephone number

(509) 766-9615

Fax number

8. Check One:



Permit Renewal (including renewal of temporary permits)

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: _____

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.

Signature*

Date

Plant Manager

Title

Jeffrey S. Johnson

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

1. 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: REC owns and operates a high purity polysilicon and silane plant in Moses Lake. REC sells polysilicon for use mainly in the photovoltaic industry while it uses silane gas as a raw material for polysilicon production. The facility discharges low chloride wastewater to the City of Moses Lake, Sand Dunes Treatment Plant; high chloride and high sodium, high silicate wastewaters to a series of lined evaporation ponds; and non-contact cooling water to a 60 million gallon lined storage pond and 125 acre land application site.

2012 NAICS Codes

Silane Gas: 325180 - Other Basic Inorganic Chemical Manufacturing

Solar Grade Polysilicon: 331410 - Nonferrous Metal (Except Aluminum) Smelting and Refining

1987 SIC Codes

Silane Gas: 2819

Solar Grade Polysilicon: 3339

2. List raw materials and products used at his facility:

Type	RAW MATERIALS	Quantity
<i>Grapes (Example)</i>		<i>1,000 tons per year</i>
See Attachment 1 - Material Imports		
Type	PRODUCTS	Quantity
<i>Grape Juice(Example)</i>		<i>300,000 gallons per year</i>
Solar Grade Silicon		Quantities are business confidential
Silane Gas		Quantities are business confidential
Calcium Chloride		750,000 pounds per year

SECTION C. PLANT OPERATIONAL CHARACTERISTICS

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

Process	Waste Stream Name	Waste Stream ID#	Batch (B) or Continuous (C) Process
Various	Low Chloride System	001	B
Various	High Chloride System and High Sodium High Silicate System	004	B
Noncontact Cooling	Land Application	003	B

- On a separate sheet, produce a schematic drawing showing production processes, water flow through the facility, wastewater treatment devices and waste streams as named above. The drawing should indicate the source of intake water and show the operations contributing wastewater to the effluent. The treatment units should be labeled. Construct a water balance by showing average flows between intakes, operations, treatment units, and points of discharge to the POTW. (*See the example on page 16 of this application form.*)
- What is the maximum daily wastewater discharge flow? 300,000 gallons/day

What is the maximum average monthly wastewater discharge flow (daily flows averaged over a month)? 210,000 gallons/day
- Describe any planned wastewater treatment improvements or changes in wastewater disposal methods, and the schedule for these improvements. (*Use additional sheets, if necessary and label as attachment C4.*)

The low chloride treatment system and the high chloride treatment system consist of nearly identical unit operations, but each are permitted to discharge to separate locations. In both systems, incoming wastewater enters a flow equalization tank before being routed to a clarifier, a thickener, and a filter press prior to discharge. The low chloride system is permitted to discharge via Outfall 001 to the City of Moses Lake POTW. The high chloride system is permitted to discharge to the evaporation pond system. REC requests the flexibility to allow low chloride wastewater system to treat the high chloride wastewater and permitted to discharge via Outfall 004. REC seeks input from the Department of Ecology regarding which infrastructure changes, monitoring systems, control systems, and failsafe mechanisms and procedures will be required to demonstrate that high chloride wastewater will not be discharged to the POTW via Outfall 001. REC requests that upon Ecology approval of an Engineering Report demonstrating the aforementioned requirements, REC be permitted to discharge high chloride wastewater from the low chloride treatment system via Outfall 004.

5. If production processes are subject to seasonal variations, provide the following information. The combined value for each month should equal the estimated total monthly flow. Please indicate the proper flow 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
Estimated Total Monthly Flow (GPD)												

6. How many hours a day does this facility typically operate? 24

How many days a week does this facility typically operate? 7

How many weeks per year does this facility typically operate? 52

7. 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 pounds for solids*). For solvents and solvent-based cleaners, include a copy of the material safety data sheet and estimate the quantity used. (*Use additional sheets, if necessary, and label as attachment C.7.*)

Materials/Quantity Stored:

There will not be any new oils, paints, greases, solvents or cleaners introduced to the facility beyond what is currently stored onsite. Quantities for some of the chemicals may be increased in accordance with all applicable federal, state, and local laws and regulations. See Section B subpart 8 for further information. Material safety data sheets for all chemicals stored onsite were provided during the 2007 permit modification.

8. Some types of facilities are required to have spill or waste control plans. Does Yes No

this facility have:

- | | | | |
|----|---|-------------------------------------|-------------------------------------|
| a. | A spill prevention, control, and countermeasure plan (40 CFR 112)? | <input checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. | A runoff, spillage, or leak control plan (per WAC 173-216-110(f))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. | Any spill or pollution prevention plan required by local, state or federal authorities? If yes specify: <u>SPCC Plan per 40CFR112</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. | A solid waste control plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. | A Slug Discharge Control Plan (40 CFR 403.8(f)(2)(v))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SECTION D. WATER CONSUMPTION AND WATER LOSS

1. Potable water source(s):

☒ ☐ Public System (Specify) City of Moses Lake

☐ ☐ Private Well ☐ Surface Water

a. Water Right Permit Number: City of Moses Lake

b. Legal Description of Water Source

_____ 1/4S, _____ 1/4E, _____, Section, _____ TWN, _____ R

2. Potable water use

a. Indicate total water use _____

Gallons per day (average) 400,000

Gallons per day (maximum) 1,300,000

b. Is water metered?

☒ YES ☐ NO

SECTION E. WASTEWATER INFORMATION

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

Intake: Metered

Effluent Flow meter

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.

See Attachment 2 - Parameter Monitoring per State Waste Discharge Permit Number ST 8121 for a summary of collection methods by parameter. Results of parameters in addition to those specified in question E.4 below are reported in the monthly Discharge Monitoring Reports (DMRs). The results shown below in E.4 are from August-December 2013 DMRs.

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.**

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	BOD (5 day)		62	21.1	22	SM 5210 B	/2 mg/l
	COD					SM 5220 D	/10 mg/l
X	Total suspended solids		914	48.2	109	SM 2540 D	/5 mg/l
	Fixed Dissolved Solids					SM 2540 E	
X	Total dissolved solids		2604	738	109	SM 2540 C	
X	Conductivity (micromhos/cm)	122	3644		continuous	SM 2510 B	
X	Ammonia-N as N	0.2	8.7	2.8	5	SM 4500-NH ₃ C	/0.3 mg/L
X	pH	6.1	9.8		continuous	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		160	32.8	22	SM 4500-NO ₃ 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
X	Total-phosphorous-P as P	0.1	0.2	0.1	5	SM 4500-P E/P/F	10 µg/l
X	Total Oil & grease		3.3	1.8	22	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
X	Calcium	23.2	184	85.2	5	EPA 200.7	10 µg/l
X	Chloride		101.2	34.5	109	SM 4500-Cl C	0.15 µg/l
X	Fluoride		15.4	6.23	109	SM 4500-F E	.025/0.1 mg/l
X	Magnesium	2.9	7.6	21.1	5	EPA 200.7	10/50 µg/l
X	Potassium	7.7	252	57.1	5	EPA 200.7	700/ µg/l
X	Sodium		295	117.6	109	EPA 200.7	29/ µg/l
X	Sulfate		722	205	109	SM 4500-SO ₄ C/D	/200 µg/l
	Arsenic(total)					EPA 200.8	0.1/0.5 µg/l

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			
	Barium (total)					EPA 200.8	0.5/2 µg/l
	Cadmium (total)					EPA 200.8	.05/.25 µg/l
	Chromium (total)					EPA 200.8	0.2/1 µg/l
	Copper (total)					EPA 200.8	0.4/2 µg/l
	Lead (total)					EPA 200.8	0.1/.5 µg/l
	Mercury (total) pg/L					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
	Selenium (total)					EPA 200.8	1/1 µg/l
	Silver (total)					EPA 200.8	.04/.2 µg/l
	Zinc (total)					EPA 200.8	0.5/2.5 µg/l

6. Does this facility use any of the following chemicals as raw materials or produce them as part of the manufacturing process, or are they present in the wastewater? ☒ YES ☐ NO

(The number in the column next to the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.)

If yes, specify how the chemical is used and the quantity used or produced: A catalyst containing copper is used at an annual rate of approximately 100,000 pounds per year in a proprietary operation.

METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total	7440-36-0	Nickel, Total	7440-02-0
Arsenic, Total	7440-38-2	Selenium, Total	7782-49-2
Beryllium, Total	7440-41-7	Silver, Total	7440-22-4
Cadmium, Total	7440-43-9	Thallium, Total	7440-28-0
Chromium (hex) dissolved	18540-29-9	Zinc, Total	7440-66-6
Chromium, Total	7440-47-3		
Copper, Total	7440-50-8	Cyanide, Total	57-12-5
Lead, Total	7439-92-1	Cyanide, Weak Acid Dissociable	
Mercury, Total	7439-97-6)	Phenols, Total	

PESTICIDES			
Aldrin	309-00-2	Endrin	72-20-8
alpha-BHC	319-84-6	Endrin Aldehyde	7421-93-4
beta-BHC	319-85-7	Heptachlor	76-44-8
gamma-BHC	58-89-9	Heptachlor Epoxide	1024-57-3
delta-BHC	319-86-8	PCB-1242	53469-21-9
Chlordane	57-74-9	PCB-1254	11097-69-1
4,4'-DDT	50-29-3	PCB-1221	11104-28-2
4,4'-DDE	72-55-9	PCB-1232	11141-16-5
4,4' DDD	72-54-8	PCB-1248	12672-29-6
Dieldrin	60-57-1	PCB-1260	11096-82-5
alpha-Endosulfan	959-98-8	PCB-1016	12674-11-2
beta-Endosulfan	33213-65-9	Toxaphene	8001-35-2
Endosulfan Sulfate	1031-07-8		

VOLATILE COMPOUNDS			
Acrolein	107-02-8		
Acrylonitrile	107-13-1	1,1-Dichloroethylene	75-35-4
Benzene	71-43-2	1,2-Dichloropropane	78-87-5
Bromoform	75-25-2	1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene)	542-75-6
Carbon tetrachloride	56-23-5	Ethylbenzene	100-41-4
Chlorobenzene	108-90-7	Methyl bromide (Bromomethane)	74-83-9
Chloroethane	75-00-3	Methyl chloride (Chloromethane)	74-87-3
2-Chloroethylvinyl Ether	110-75-8	Methylene chloride	75-09-2
Chloroform	67-66-3	1,1,2,2-Tetrachloroethane	79-34-5
Dibromochloromethane	124-48-1	Tetrachloroethylene	127-18-4
1,2-Dichlorobenzene	95-50-1	Toluene (108-88-3)	
1,3-Dichlorobenzene	(541-73-1)	1,2-Trans-Dichloroethylene (Ethylene dichloride)	156-60-5
1,4-Dichlorobenzene	106-46-7	1,1,1-Trichloroethane	71-55-6
Dichlorobromomethane	75-27-4	1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethane	75-34-3	Trichloroethylene	79-01-6
1,2-Dichloroethane	107-06-2	Vinyl chloride	75-01-4

ACID COMPOUNDS

2-Chlorophenol	95-57-8	4-nitrophenol	100-02-7
2,4-Dichlorophenol	120-83-2	Parachlorometa cresol (4-chloro-3-methylphenol)	59-50-7
2,4-Dimethylphenol	105-67-9	Pentachlorophenol	87-86-5
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	534-52-1	Phenol	108-95-2
2,4 dinitrophenol	51-28-5	2,4,6-Trichlorophenol	88-06-2
2-Nitrophenol	88-75-5		

BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene	83-32-9	3,3-Dichlorobenzidine	91-94-1
Acenaphthylene	208-96-8	Diethyl phthalate	84-66-2
Anthracene	120-12-7	Dimethyl phthalate	131-11-3
Benzidine	92-87-5	Di-n-butyl phthalate)	84-74-2
Benzyl butyl phthalate	85-68-7	2,4-dinitrotoluene	121-14-2
Benzo(a)anthracene	56-55-3	2,6-dinitrotoluene	606-20-2
Benzo(b)fluoranthene (3,4-benzofluoranthene)	205-99-2	Di-n-octyl phthalate	117-84-0
Benzo(j)fluoranthene	205-82-3	1,2-Diphenylhydrazine (as <i>Azobenzene</i>)	122-66-7
Benzo(k)fluoranthene (11,12-benzofluoranthene)	207-08-9	Fluoranthene	206-44-0
Benzo(r,s,t)pentaphene	189-55-9	Fluorene	86-73-7
Benzo(a)pyrene	50-32-8	Hexachlorobenzene	118-74-1
Benzo(ghi)Perylene	191-24-2	Hexachlorobutadiene	87-68-3
Bis(2-chloroethoxy)methane	111-91-1	Hexachlorocyclopentadiene	77-47-4
Bis(2-chloroethyl)ether	111-44-4	Hexachloroethane	67-72-1
Bis(2-chloroisopropyl)ether	39638-32-9	Indeno(1,2,3-cd)Pyrene	193-39-5
Bis(2-ethylhexyl)phthalate	117-81-7	Isophorone	78-59-1
4-Bromophenyl phenyl ether	101-55-3	3-Methyl cholanthrene	56-49-5
2-Chloronaphthalene	91-58-7	Naphthalene	91-20-3
4-Chlorophenyl phenyl ether	7005-72-3	Nitrobenzene	98-95-3
Chrysene	218-01-9	N-Nitrosodimethylamine	62-75-9
Dibenzo (a,j)acridine	224-42-0	N-Nitrosodi-n-propylamine	621-64-7
Dibenzo (a,h)acridine	226-36-8	N-Nitrosodiphenylamine	86-30-6
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	53-70-3	Perylene	198-55-0
Dibenzo(a,e)pyrene	192-65-4	Phenanthrene	85-01-8
Dibenzo(a,h)pyrene	189-64-0	Pyrene	129-00-0
		1,2,4-Trichlorobenzene	120-82-1

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

If yes, specify the material and quantity used:

Outside contractor provides pest control onsite using minimal quantites of zinc phosphide for rodent control and herbicide applications of Roundup, Banvel, 2,4-D Amine, and Surflan AS. Sodium hypochlorite is added to cooling towers to prevent microbial growth.

- 8 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 as Attachment E8):

9. Is the wastewater being discharged, or proposed for discharge, to the POTW designated as a dangerous waste according to the procedures in Chapter 173-303 WAC?

☐ YES ☒ NO ☐ DON'T KNOW

10. If the answer to question 9 above is yes, how did the waste designate as a dangerous waste (check appropriate box)?

For Listed and TCLP Characteristic Wastes only, also provide the Dangerous Waste Number(s).

Listed Waste ☐ Dangerous Waste Number(s) _____

Characteristic Wastes Dangerous Waste Number(s) _____

Ignitable ☐

Reactive ☐

Corrosive ☐

TCLP ☐

State Only Dangerous Wastes Dangerous Waste Number(s) _____

Toxicity ☐

Persistent ☐

For questions about waste designation under the *Dangerous Waste Regulations*, Chapter 173-303 WAC, contact Ecology's Hazardous Waste and Toxics Program at:

Northwest Regional Office - Bellevue	(425) 649-7000
Southwest Regional Office - Lacey	(360) 407-6300
Central Regional Office - Yakima	(509) 575-2490
Eastern Regional Office - Spokane	(509) 329-3400

SECTION F. SEWER INFORMATION

1. Is an inspection and sampling manhole or similar structure available on-site? ☒ YES ☐ NO
*If yes, attach a map or hand drawing of the facility that shows the location of these structures
(Label as attachment F1 or this may be combined with map in H8, if H8 is applicable to your
facility.)*

SECTION G. OTHER PERMITS

1. List all environmental control permits or approvals needed for this facility; for example, air emission permits.

Air Operating Permit Number 13AQ-E488

State Waste Discharge Permit Number ST 8121

City of Moses Lake Industrial Waste Discharge Permit Number 4

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 a Washington State Stormwater Industrial Stormwater General Permit? ☐ YES ☒ NO

If you answered no to both questions above, complete the following questions 2 through 5.

2. Does your facility discharge stormwater: *(Check all that apply)*

☐ To storm sewer system *(provide name of storm sewer system operator: _____)*

☐ Directly to any surface waters of Washington State *(e.g., river, lake, creek, estuary, ocean).*

Specify waterbody name(s) _____

☐ Indirectly to surface waters of Washington State *(i.e., flows over adjacent properties first).*

☐ To a Sanitary Sewer

☒ Directly to ground waters of Washington State via:

☐ Dry well

☐ Drainfield

☒ Other

3. 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 (please specify): _____

4. Material handling/management practices

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

- | | | | |
|--|-------------------------------------|--|-------------------------------------|
| <input checked="" type="checkbox"/> <input type="checkbox"/> | Solvents | <input checked="" type="checkbox"/> <input type="checkbox"/> | Hazardous Wastes |
| <input checked="" type="checkbox"/> <input type="checkbox"/> | Scrap Metal | <input checked="" type="checkbox"/> <input type="checkbox"/> | Acids or Alkalies |
| <input checked="" 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 stormwater discharges: (*check all that apply*)

- | | | | |
|--|-----------------------------|--|-------------------------------------|
| <input checked="" 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 |
| <input checked="" type="checkbox"/> <input type="checkbox"/> | Spill Prevention | <input checked="" type="checkbox"/> <input type="checkbox"/> | Operational BMPs |
| <input type="checkbox"/> <input type="checkbox"/> | Surface Leachate Collection | <input checked="" type="checkbox"/> <input type="checkbox"/> | Vegetation Management |
| <input checked="" type="checkbox"/> <input type="checkbox"/> | Overhead Coverage | <input type="checkbox"/> <input type="checkbox"/> | Other (<i>please list</i>): _____ |

5. Attach a facility site 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 (*See example on page 16 of this application*). *Label this as attachment H.5.*

SECTION I. OTHER INFORMATION

1. Describe liquid wastes or sludges being generated by your facility that are not disposed of in the waste stream(s) and how they are being disposed of. For each type of waste, provide type of waste and the name, address, and phone number of the hauler.

Calcium carbonate, calcium hydroxide, silicon powder, and grit are the major components from four wastewater treatment systems. All four wastewater treatment systems utilize neutralization, precipitation, and solids dewatering prior to disposal. Additionally, neutralized dryer solids (primarily consisting of silicon and sodium sesquicarbonate) are transferred for disposal. All solids are transported to the Grant County Landfill via Consolidated Disposal Service 2370 Basin St SW, Ephrata, WA 98823.

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

Materials stored outside are typically in curbed, concrete containment areas consisting of at least 110% of the largest vessel volume. Containment areas are inspected monthly for integrity and precipitation capacity. Sampling and analysis of contents is conducted prior to removal of containment area liquids to determine correct treatment/disposal option. This facility has an up-to-date SPCC Plan on site that details storage locations and quantities of material regulated by 40CFR112.

3. Have you designated the wastes described above according to the applicable ☒ YES ☐ NO procedures of Dangerous Waste Regulations, Chapter 173-303 WAC?

SECTION J. CERTIFICATIONS

1. **Approval by Publicly-Owned Treatment Works [required by WAC 173-216-070(4)(b)]**

I approve of the discharge as described in this application. The applicant is:

(Please check the appropriate box below.)

☒ ☐ ☐ A Significant Industrial User (see Definitions at the end of this Section)

☐ ☐ ☐ A Categorical Industrial User

☐ ☐ ☐ Neither of the above

Name and location of sewer system to which this project will be tributary:

City of Moses Lake Wastewater Treatment Plant

Treatment Works Owner: City of Moses Lake

Street: Municipal Services Department, PO Box 1579

City/State: Moses Lake, WA Zip: 98837

Wastewater Division
Supervisor

Signature of Treatment Works Authority

Date

Title

Tony Pfluger

Printed Name

Under review by City of Moses Lake Wastewater
Division Supervisor at the time of submittal.

2. **Application review by Intermediate Sewer Owner at point of discharge (if applicable)**

I hereby acknowledge that I have reviewed the application for discharge to this sewer system.

Name and location of sewer system to which this project will be tributary:

Sewer System Owner:

Street:

City/State: Zip:

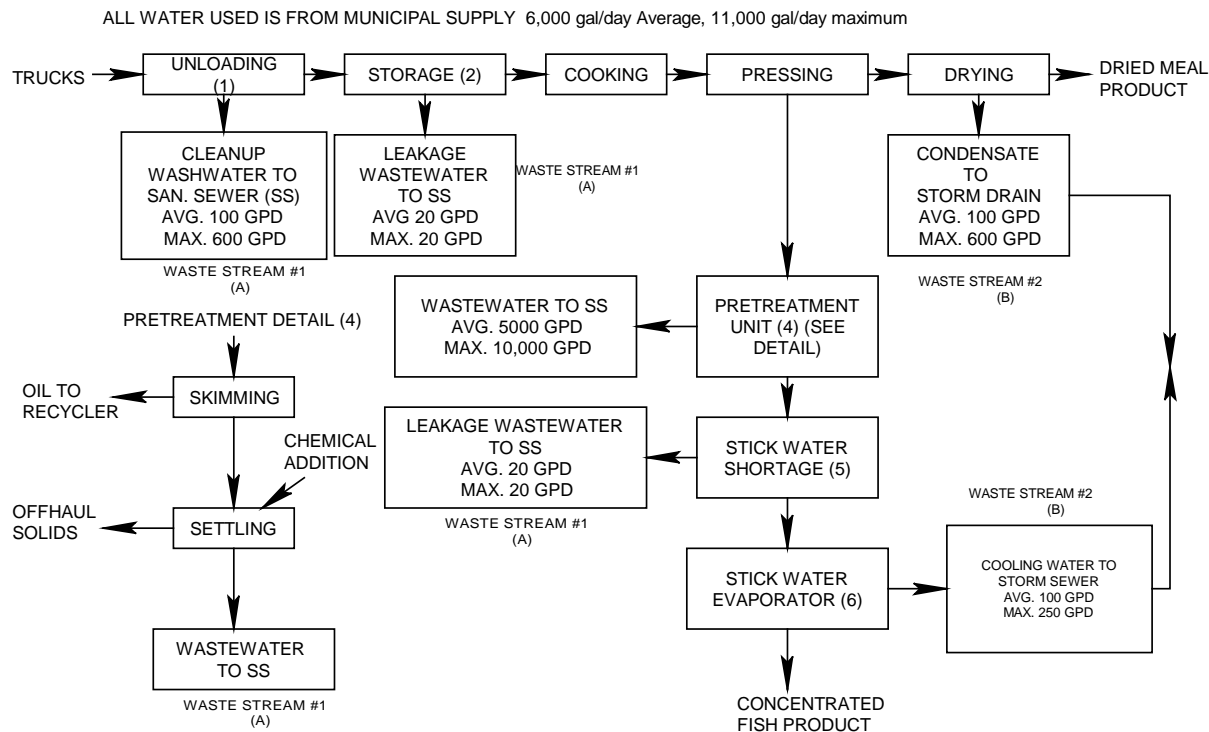
Signature of Sewer System Authority

Date

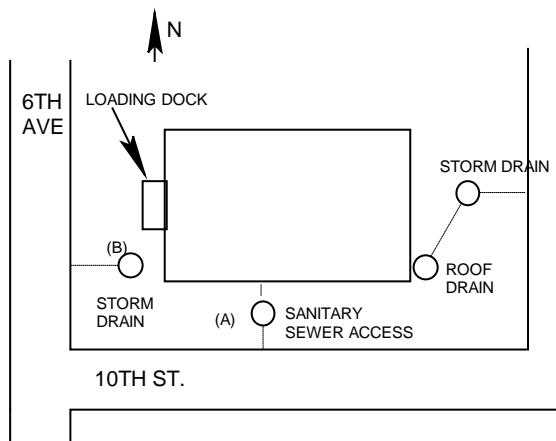
Title

Printed Name

Example 1 for application section C.2. (SCHEMATIC DIAGRAM)



Example 2 for application section F1 or H8 (FACILITY SITE MAP)



DEFINITIONS

Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

Control Authority - means the Washington State Department of Ecology in the case of non-delegated POTWs or means the POTW in the case of delegated POTWs.

Categoric Industrial User (CIU): An industrial user subject to national categorical pretreatment standards promulgated by EPA (40 CFR 403.6 and 40 CFR parts 405-471).

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.8. Additional results of effluent testing (CD-ROM)
- ☒ ☐ F.1. Facility site map
- ☒ ☐ H.5. Stormwater drainage map

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.

Attachment 1. Material Imports

Material	Annual Consumption	Units
Lime	5,017,553	pounds
Trona	2,628,000	pounds
Magnesium Oxide	66,300	pounds
Sodium Hydroxide (25%)	1,326,965	gallons
Sulfuric Acid (98%)	5,466	gallons
Flocculant	1,367	gallons
Coagulant	28,242	gallons
Hydrochloric Acid (38%)	34,164	gallons
Antiscalants	1,367	gallons
Boiler Chemicals	683	gallons
Oxygen Scavenger (Boiler)	683	gallons
Surfactant	142,122	gallons
Antifoam	570,539	gallons
Silicon Tetrachloride	3,440,800	pounds
Metallurgical Grade Silicon	44,300,021	pounds
Cuprous Chloride	106,088	pounds
Carbon Dioxide	215,671	pounds

Attachment 2 - Discharge Monitoring per Permit ST 8121

Parameter	Units	Sampling Frequency	Sample Type
TDS	mg/L	2/month	grab
pH	standard units	2/month	grab
Sodium	mg/L	2/month	grab
Chloride	mg/L	2/month	grab
Fluoride	mg/L	2/month	grab
Magnesium	mg/L	2/month	grab
Potassium	mg/L	2/month	grab
Manganese	mg/L	2/month	grab
Calcium	mg/L	2/month	grab
Alkalinity	mg/L	2/month	grab
NO ₃ -N	mg/L	2/month	grab
NH ₃ -N	mg/L	2/month	grab
Total P	mg/L	2/month	grab

Notes:

Abbreviations: TDS = total dissolved solids, mg/L = milligrams per liter,

NO₃-N = nitrate as nitrogen, NH₃-N = ammonia as nitrogen, P = phosphorus.



Permit Number: ST0008121

Permittee: REC Solar Grade Silicon

Facility County: Grant

Receiving Waterbody:

Monitoring Period: 08/01/2013 - 08/31/2013

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE
POTW, DUNES TREATMENT PLANT

Version: 1

Week	Monitoring Point	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Temperature Measured Degrees F Continuous Metered/Recorded	Total BOD5 Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Oil & Grease Total recoverable, FOG, HEM Milligrams/L (mg/L) Weekly Grab	Total Suspended Solids (TSS) Total suspended (TSS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)
1-Th	8/1/13	48365	7.2	8.1	1514.0	2215.0	88.0			12.5	1436.0	579.2
1-F	8/2/13	65759	6.7	8.9	1391.0	2209.0	83.0			42.5	902.0	494.7
1-Sa	8/3/13	58671	6.9	7.9	1680.0	2023.0	80.0					
2-Su	8/4/13	140	7.7	8.1	1715.0	2075.0	80.0					
2-M	8/5/13	27052	7.7	8.8	259.0	2056.0	82.0			2.3	240.0	54.1
2-T	8/6/13	10206	7.5	8.7	314.0	1241.0	82.0			29.9	692.0	58.9
2-W	8/7/13	76377	6.9	7.6	1201.0	1396.0	86.0	22.5	1.4	32.1	580.0	369.5
2-Th	8/8/13	27398	6.3	7.8	161.0	1317.0	86.0			31.9	760.0	173.7
2-F	8/9/13	37345	6.9	8.7	163.0	1452.0	84.0			26.4	642.0	200.0
2-Sa	8/10/13	28038	6.1	6.9	1166.0	2947.0	90.0					
3-Su	8/11/13	299	6.3	6.9	2655.0	2863.0	88.0					
3-M	8/12/13	30381	6.1	8.4	1463.0	2655.0	88.0			7.2	210.0	53.3
3-T	8/13/13	35854	7.5	8.7	1638.0	2080.0	90.0			27.0	434.0	129.8
3-W	8/14/13	71014	6.9	8.1	1653.0	1810.0	85.0	5.0	1.4	12.9	326.0	193.0
3-Th	8/15/13	30197	7.2	8.7	1478.0	1813.0	84.0			30.5	662.0	166.7
3-F	8/16/13	25931	7.3	8.1	1552.0	1686.0	86.0			74.5	1118.0	241.8
3-Sa	8/17/13	25958	8.1	8.9	1561.0	1788.0	88.0					
4-Su	8/18/13	24441	8.3	8.6	1396.0	1663.0	86.0					
4-M	8/19/13	52112	8.1	8.6	1393.0	1658.0	84.0			47.8	742.0	322.4
4-T	8/20/13	64099	8.0	8.2	1346.0	1420.0	86.0			36.7	794.0	424.4
4-W	8/21/13	28723	7.6	8.1	1241.0	1419.0	82.0	11.0	1.4	5.7	450.0	107.8
4-Th	8/22/13	12985	8.0	8.3	1402.0	1547.0	84.0			1.4	294.0	31.8
4-F	8/23/13	26217	7.4	8.2	1188.0	1523.0	88.0			96.4	734.0	160.5
4-Sa	8/24/13	25882	7.5	8.0	1275.0	1384.0	82.0					
5-Su	8/25/13	32633	7.9	8.0	1289.0	1387.0	85.0					
5-M	8/26/13	50069	7.7	8.2	1258.0	1463.0	84.0			29.7	864.0	360.8
5-T	8/27/13	53555	7.1	7.7	1261.0	1389.0	84.0			18.1	910.0	406.4
5-W	8/28/13	34438	7.0	8.1	1155.0	1666.0	84.0	25.2	1.4	52.8	850.0	244.1
5-Th	8/29/13	2006	7.0	8.0	1580.0	1762.0	85.0			41.2	984.0	16.4
5-F	8/30/13	28997	7.0	8.1	1449.0	1787.0	85.0			21.5	1218.0	294.6
5-Sa	8/31/13	258	7.5	8.2	1650.0	1787.0	80.0					
Minimum			6.1		161							
			>= 6.0		Report Only							
Average		33400					84.8065	15.925	1.4	30.9545	720.091	231.086
		<= 210000					Report Only	Report Only	Report Only	<= 350	Report Only	<= 3240
Maximum		76377		8.9	2655	2947	90	25.2	1.4	96.4	1436	579.2
		<= 300000		<= 11.0	Report Only	Report Only	Report Only	<= 300	<= 100	Report Only	Report Only	<= 4560



Week	Monitoring Point	Sodium Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sodium Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Nitrate Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Alkalinity Total Monthly Milligrams/L (mg/L) Composite Sample (24 HR Time Proportional comp)	Calcium Total Monthly Milligrams/L (mg/L) Composite Sample (24 HR Time Proportional comp)
001	001	001	001	001	001	001	001	001	001	001	001	001
1-Th	8/1/13	131.0	52.9	50.3	20.3	11.6	4.6	442.1	178.3			
1-F	8/2/13	111.0	60.9	33.1	18.2	9.9	5.4	199.4	109.3			
1-Sa	8/3/13											
2-Su	8/4/13											
2-M	8/5/13	76.9	17.3	17.7	4.0	2.3	0.5	2.5	0.6			
2-T	8/6/13	137.9	11.8	44.9	3.8	7.4	0.6	269.8	22.9			
2-W	8/7/13	133.5	85.0	48.1	30.7	8.2	5.2	323.0	205.8	18.9	63.8	97.5
2-Th	8/8/13	133.3	30.4	43.2	9.9	7.1	1.6	335.2	76.6			
2-F	8/9/13	100.6	31.4	34.2	10.7	8.8	2.7	211.7	66.0			
2-Sa	8/10/13											
3-Su	8/11/13											
3-M	8/12/13	81.7	20.7	19.2	4.9	2.8	0.7	30.0	7.6			
3-T	8/13/13	96.5	28.9	23.9	7.1	4.5	1.4	75.2	22.4			
3-W	8/14/13	88.5	52.4	20.9	12.4	3.7	2.2	55.3	32.8	12.2		
3-Th	8/15/13	97.1	24.4	31.0	7.8	5.4	1.4	175.3	44.1			
3-F	8/16/13	120.3	26.1	45.2	9.8	7.6	1.7	277.9	60.1			
3-Sa	8/17/13											
4-Su	8/18/13											
4-M	8/19/13	130.8	56.9	49.8	21.6	7.0	3.0	232.5	101.0			
4-T	8/20/13	124.3	66.5	45.9	24.6	5.5	3.0	265.6	142.0			
4-W	8/21/13	91.7	22.0	23.3	5.5	3.8	0.9	121.5	29.2	8.1		
4-Th	8/22/13	76.1	8.2	18.5	2.0	2.9	0.3	47.5	5.1			
4-F	8/23/13	109.2	23.9	41.7	9.2	9.3	2.0	272.9	59.7			
4-Sa	8/24/13											
5-Su	8/25/13											
5-M	8/26/13	158.4	66.1	46.7	19.5	15.4	6.4	282.7	118.1			
5-T	8/27/13	126.6	56.5	45.1	20.2	11.5	5.1	328.2	146.6			
5-W	8/28/13	134.0	38.5	43.3	12.4	11.8	3.4	297.5	85.5	42.2		
5-Th	8/29/13	145.8	2.4	43.9	0.7	11.9	0.2	304.1	5.1			
5-F	8/30/13	124.6	30.1	47.7	11.5	10.8	2.6	307.4	74.3			
5-Sa	8/31/13											
Minimum												
Average		114.991	36.9682	37.1636	12.1273	7.69091	2.49545	220.786	72.4136	20.35		
	Report Only	<= 558	Report Only	<= 63	Report Only	<= 28	Report Only	Report Only	Report Only			
Maximum		158.4	85	50.3	30.7	15.4	6.4	442.1	205.8	42.2	63.8	97.5
	Report Only	<= 796	Report Only	<= 90	Report Only	<= 46	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only



Week	Monitoring Point	Magnesium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Manganese Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Ammonia Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Phosphorus Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Potassium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Standard Units 2/Month Grab	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Sodium Total Milligrams/L (mg/L) 2/Month Grab	Chloride Milligrams/L (mg/L) 2/Month Grab
		001	001	001	001	001	002	003	003	003	003	003
1-Th	8/1/13							C				
1-F	8/2/13							C				
1-Sa	8/3/13							C				
2-Su	8/4/13							C				
2-M	8/5/13							C				
2-T	8/6/13							C				
2-W	8/7/13	3.4	41.6	8.7	0.1	9.6	252.0	C	9.2	354.0	119.6	33.2
2-Th	8/8/13							C				
2-F	8/9/13							C				
2-Sa	8/10/13							C				
3-Su	8/11/13							C				
3-M	8/12/13							C				
3-T	8/13/13							C				
3-W	8/14/13							C				
3-Th	8/15/13							531982				
3-F	8/16/13							781779				
3-Sa	8/17/13							757478				
4-Su	8/18/13							762608				
4-M	8/19/13							750454				
4-T	8/20/13							777196				
4-W	8/21/13						322.0	765828	9.6	462.0	122.5	31.1
4-Th	8/22/13							770414				
4-F	8/23/13							763503				
4-Sa	8/24/13							748361				
5-Su	8/25/13							574895				
5-M	8/26/13							C				
5-T	8/27/13							C				
5-W	8/28/13							C				
5-Th	8/29/13							C				
5-F	8/30/13							C				
5-Sa	8/31/13							C				
Minimum									9.2			
									Report Only			
Average							287	725863		408	121.05	32.15
							Report Only	Report Only		Report Only	Report Only	Report Only
Maximum		3.4	41.6	8.7	0.1	9.6	322	781779	9.6	462	122.5	33.2
		Report Only	Report Only	Report Only	Report Only	Report Only	<= 2500	Report Only	Report Only	Report Only	Report Only	Report Only

[illegible]

[illegible]

[illegible]



Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Total flow for process 001 = 1,035,400gallons.
Sanitary flow meter down from Aug, 13th - 20th. Flow was calculated by multiplying 45 gpm (Pump is rated for 40-45gpm) times number of minutes discharged.
Max flow for sanitary - 47gpm
003 Outfall August 7th total copper = 34.4 ug/L
003 Outfall August 21st total copper = 100.0 ug/L

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE POTW, DUNES TREATMENT PLANT

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
HSHS	All Parameters		C	
HCEP	All Parameters		C	

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 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 fine and imprisonment for knowing violations.

Paul Stenhouse

9/12/2013 9:44:13 AM

Signature

Date



Permit Number: ST0008121

Permittee: REC Solar Grade Silicon

Facility County: Grant

Receiving Waterbody:

Monitoring Period: 09/01/2013 - 09/30/2013

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE
POTW, DUNES TREATMENT PLANT

Version: 1

Week	Monitoring Point	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Temperature Measured Degrees F Continuous Metered/Recorded	Total BOD5 Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Oil & Grease Total recoverable, FOG, HEM Milligrams/L (mg/L) Weekly Grab	Total Suspended Solids (TSS) Total suspended (TSS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)
		001	001	001	001	001	001	001	001	001	001	001
1-Su	9/1/13	32806	6.8	9.8	1732.0	2376.0	82.0					
1-M	9/2/13	54633	7.0	7.4	1877.0	2337.0	86.0			68.3	1872.0	853.0
1-T	9/3/13	38124	6.9	8.1	1681.0	1877.0	88.0			39.1	1410.0	448.3
1-W	9/4/13	25899	7.1	8.0	1542.0	1710.0	87.0	60.0	1.4	28.6	1318.0	284.7
1-Th	9/5/13	35668	7.2	7.6	1738.0	1838.0	88.0			115.4	1306.0	388.5
1-F	9/6/13	46880	6.4	9.6	193.0	3095.0	84.0			52.3	2604.0	1018.1
1-Sa	9/7/13	61969	6.3	8.0	1904.0	3121.0	86.0					
2-Su	9/8/13	57549	7.0	7.5	1753.0	2141.0	87.0					
2-M	9/9/13	19291	7.4	7.6	1792.0	1942.0	85.0			23.0	1552.0	249.7
2-T	9/10/13	24203	7.3	7.7	1336.0	1932.0	80.0			14.9	910.0	183.7
2-W	9/11/13	22728	7.3	7.7	1241.0	1442.0	83.0	18.6	3.2	4.4	502.0	95.2
2-Th	9/12/13	10753	7.3	8.3	1318.0	1603.0	88.0			26.5	452.0	40.5
2-F	9/13/13	54391	7.6	8.3	1526.0	1701.0	88.0			24.6	930.0	421.9
2-Sa	9/14/13	62928	7.4	8.3	1503.0	1709.0	86.0					
3-Su	9/15/13	23902	7.5	8.0	1450.0	1685.0	83.0					
3-M	9/16/13	3102	7.8	8.1	1452.0	1682.0	88.0			77.3	182.0	4.7
3-T	9/17/13	35712	7.8	8.3	1467.0	1623.0	80.0			212.7	614.0	182.8
3-W	9/18/13	17432	7.3	8.6	1103.0	1596.0	74.0	33.0	2.7	25.2	866.0	125.9
3-Th	9/19/13	2588	7.5	8.5	997.0	1597.0	78.0			0.3	224.0	4.8
3-F	9/20/13	58154	6.8	7.9	1180.0	1833.0	78.0			105.8	1116.0	541.3
3-Sa	9/21/13	63578	6.6	7.3	1600.0	1825.0	81.0					
4-Su	9/22/13	29316	6.8	7.4	1461.0	1642.0	75.0					
4-M	9/23/13	245	6.8	7.5	1442.0	1564.0	80.0			15.8	1092.0	2.2
4-T	9/24/13	53264	7.1	7.4	1256.0	1522.0	84.0			8.6	616.0	273.6
4-W	9/25/13	11699	7.2	7.7	1366.0	1490.0	80.0	8.0	1.8	99.7	476.0	46.4
4-Th	9/26/13	42017	6.9	7.7	1335.0	1489.0	67.0			25.5	924.0	323.8
4-F	9/27/13	72464	6.3	7.6	1105.0	1414.0	76.0			21.2	876.0	529.4
4-Sa	9/28/13	222	6.8	8.2	122.0	1104.0	74.0					
5-Su	9/29/13	27276	7.0	8.2	124.0	1308.0	78.0			1.3	274.0	62.3
5-M	9/30/13	237	7.1	7.7	1308.0	1370.0	78.0					
Minimum			6.3		122							
			>= 6.0		Report Only							
Average		32967.7					81.7333	29.9	2.275	47.1667	957.905	289.562
		<= 210000					Report Only	Report Only	Report Only	<= 350	Report Only	<= 3240
Maximum		72464		9.8		3121	88	60	3.2	212.7	2604	1018.1
		<= 300000		<= 11.0		Report Only	Report Only	<= 300	<= 100	Report Only	Report Only	<= 4560



Week	Monitoring Point	Sodium Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sodium Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Nitrate Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Alkalinity Total Monthly Composite Sample (24 HR Time Proportional comp)	Calcium Total Monthly Composite Sample (24 HR Time Proportional comp)
001	001	001	001	001	001	001	001	001	001	001	001	001
1-Su	9/1/13											
1-M	9/2/13	143.6	65.4	47.6	21.7	8.1	3.6	211.9	96.5			
1-T	9/3/13	126.7	40.3	46.5	14.8	7.2	2.3	282.5	89.8			
1-W	9/4/13	125.7	27.1	44.8	9.7	6.2	1.3	305.6	66.0	89.8	23.0	184.0
1-Th	9/5/13	120.0	35.7	44.2	13.2	7.3	2.2	285.4	84.9			
1-F	9/6/13	183.5	71.7	42.0	16.4	7.1	2.8	722.1	282.3			
1-Sa	9/7/13											
2-Su	9/8/13											
2-M	9/9/13	173.8	27.9	42.8	6.9	7.0	1.1	373.8	60.2			
2-T	9/10/13	121.9	24.6	42.6	8.6	5.3	1.1	284.3	57.4			
2-W	9/11/13	92.8	17.6	28.4	5.4	3.6	0.7	116.8	22.2	21.0		
2-Th	9/12/13	82.9	7.5	22.4	2.0	3.1	0.3	84.1	7.5			
2-F	9/13/13	125.1	56.8	50.1	22.8	9.3	4.3	226.2	102.6			
2-Sa	9/14/13											
3-Su	9/15/13											
3-M	9/16/13	77.6	2.0	19.7	0.5	3.0	0.1	43.2	1.1			
3-T	9/17/13	104.2	31.1	31.8	9.4	5.5	1.6	144.1	43.0			
3-W	9/18/13	118.1	17.2	38.5	5.6	7.6	1.1	275.6	40.0	43.1		
3-Th	9/19/13	69.1	1.5	17.0	0.4	2.3	0.0	22.9	0.5			
3-F	9/20/13	111.2	54.0	41.7	20.3	8.3	4.0	248.0	120.3			
3-Sa	9/21/13											
4-Su	9/22/13											
4-M	9/23/13	106.1	0.2	41.5	0.1	7.4	0.0	290.0	0.6			
4-T	9/24/13	90.0	39.9	32.1	14.3	4.6	2.0	148.5	66.0			
4-W	9/25/13	80.9	7.9	27.3	2.7	4.1	0.4	112.3	10.9	16.0		
4-Th	9/26/13	115.7	40.6	49.9	17.5	5.6	1.9	197.3	69.2			
4-F	9/27/13	99.8	60.4	38.9	23.5	5.7	3.5	284.3	171.8			
4-Sa	9/28/13											
5-Su	9/29/13	69.2	15.8	18.9	4.3	2.8	0.6	44.5	10.2			
5-M	9/30/13											
Minimum												
Average		111.329	30.7238	36.6048	10.481	5.76667	1.6619	223.971	66.8095	42.475		
	Report Only		<= 558	Report Only	<= 63	Report Only	<= 28	Report Only	Report Only	Report Only		
Maximum		183.5	71.7	50.1	23.5	9.3	4.3	722.1	282.3	89.8	23	184
	Report Only		<= 796	Report Only	<= 90	Report Only	<= 46	Report Only	Report Only	Report Only	Report Only	Report Only



Week	Monitoring Point	Magnesium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Manganese Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Ammonia Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Phosphorus Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Potassium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Standard Units 2/Month Grab	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Sodium Total Milligrams/L (mg/L) 2/Month Grab	Chloride Total Milligrams/L (mg/L) 2/Month Grab
1-Su	9/1/13							C				
1-M	9/2/13							C				
1-T	9/3/13							C				
1-W	9/4/13	7.6	78.0	1.5	0.1	9.5	338.0	C	9.7	398.0	128.7	30.0
1-Th	9/5/13							C				
1-F	9/6/13							C				
1-Sa	9/7/13							C				
2-Su	9/8/13							C				
2-M	9/9/13							C				
2-T	9/10/13							C				
2-W	9/11/13							C				
2-Th	9/12/13							C				
2-F	9/13/13							C				
2-Sa	9/14/13							C				
3-Su	9/15/13							C				
3-M	9/16/13							C				
3-T	9/17/13							C				
3-W	9/18/13						340.0	C	9.1	460.0	116.7	31.2
3-Th	9/19/13							C				
3-F	9/20/13							C				
3-Sa	9/21/13							C				
4-Su	9/22/13							C				
4-M	9/23/13							C				
4-T	9/24/13							C				
4-W	9/25/13							C				
4-Th	9/26/13							C				
4-F	9/27/13							C				
4-Sa	9/28/13							C				
5-Su	9/29/13							C				
5-M	9/30/13							C				
Minimum									9.1			
									Report Only			
Average							339	C		429	122.7	30.6
							Report Only	Report Only		Report Only	Report Only	Report Only
Maximum		7.6	78	1.5	0.1	9.5	340	C	9.7	460	128.7	31.2
		Report Only	Report Only	Report Only	Report Only	Report Only	<= 2500	Report Only	Report Only	Report Only	Report Only	Report Only

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]



Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Wastewater DMR Summary – September 2013

General Notes

- pH & conductivity readings exclude extreme, off-scale data spikes caused from IE calibrations, flow cutoffs, keyed mikes, flow startups, etc

Process Effluent

- Total flow for September is 989,030 gallons.

No Sample on Sept. 30th (no flow) so Sunday's sample (9-29-13) was used.

- No exceedences.

Sanitary Sewer

- No exceedences.
- Maximum flow 55 gpm

Monitor Wells

- No comments.

Outfall 004

- No Comments.

003 Outfall - Irrigation Outfall and Firewater Pond

- 003 Outfall September 4th total copper = 42.6 ug/L
- 003 Outfall September 18th total copper = 33.2 ug/L.

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE POTW, DUNES TREATMENT PLANT

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
HSHS	All Parameters		C	No discharge for the month.
HCEP	All Parameters		C	No water applied for dust control.

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 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 fine and imprisonment for knowing violations.

Paul Stenhouse

Signature

10/14/2013 2:52:03 PM

Date



Permit Number: ST0008121

Permittee: REC Solar Grade Silicon

Facility County: Grant

Receiving Waterbody:

Monitoring Period: 10/01/2013 - 10/31/2013

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE
POTW, DUNES TREATMENT PLANT

Version: 1

Week	Monitoring Point	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Temperature Measured Degrees F Continuous Metered/Recorded	Total BOD5 Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Oil & Grease Total recoverable, FOG, HEM Milligrams/L (mg/L) Weekly Grab	Total Suspended Solids (TSS) Total suspended (TSS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)
1-T	10/1/13	29672	6.9	7.8	1203.0	1338.0	78.0			19.4	718.0	177.7
1-W	10/2/13	26049	7.2	7.8	1382.0	1650.0	76.0	34.8	1.4	20.4	678.0	147.3
1-Th	10/3/13	36423	6.8	7.7	1334.0	1538.0	64.0			22.1	646.0	196.3
1-F	10/4/13	56824	6.6	7.1	1304.0	1511.0	76.0			17.6	402.0	190.5
1-Sa	10/5/13	56032	7.1	8.3	1511.0	1650.0	76.0					
2-Su	10/6/13	53468	7.2	8.1	1422.0	1568.0	74.0					
2-M	10/7/13	47358	7.4	8.4	1383.0	1621.0	76.0			12.2	544.0	214.8
2-T	10/8/13	69053	7.5	8.0	1073.0	1493.0	74.0			16.9	484.0	278.7
2-W	10/9/13	50690	7.1	7.8	991.0	1252.0	74.0	26.1	1.7	15.8	446.0	188.5
2-Th	10/10/13	14384	7.8	8.4	1252.0	1517.0	72.0			3.8	312.0	37.4
2-F	10/11/13	62614	6.9	8.5	1120.0	1524.0	72.0			45.7	520.0	271.5
2-Sa	10/12/13	52899	6.6	7.0	1183.0	1428.0	73.0					
3-Su	10/13/13	28889	6.7	7.5	1369.0	1447.0	70.0					
3-M	10/14/13	26142	6.8	7.7	1314.0	1513.0	69.0			35.0	662.0	144.3
3-T	10/15/13	5395	7.0	7.5	1396.0	1525.0	72.0			56.0	462.0	20.8
3-W	10/16/13	21670	7.1	7.5	1424.0	1491.0	70.0	13.2	2.6	3.0	426.0	77.0
3-Th	10/17/13	24554	6.8	7.5	1420.0	1593.0	72.0			6.0	356.0	72.9
3-F	10/18/13	49342	6.4	8.7	583.0	1882.0	72.0			30.0	880.0	362.1
3-Sa	10/19/13	49052	6.6	9.1	868.0	3644.0	72.0					
4-Su	10/20/13	23729	8.2	9.0	3333.0	3608.0	73.0					
4-M	10/21/13	8985	8.0	8.7	2941.0	3435.0	65.0			223.0	1330.0	99.7
4-T	10/22/13	24037	7.7	8.2	2808.0	3087.0	68.0			914.4	852.0	170.8
4-W	10/23/13	22591	7.4	8.4	2019.0	2787.0	72.0	62.0	3.3	94.8	1088.0	204.9
4-Th	10/24/13	69644	7.2	8.1	1802.0	2540.0	72.0			57.5	880.0	511.1
4-F	10/25/13	26533	7.0	8.4	1681.0	1831.0	70.0			32.9	620.0	137.2
4-Sa	10/26/13	43362	6.8	8.0	1682.0	1859.0	72.0					
5-Su	10/27/13	419	6.9	7.1	448.0	1725.0	70.0					
5-M	10/28/13	25010	6.9	8.4	792.0	2079.0	72.0			32.3	886.0	184.9
5-T	10/29/13	221	6.3	8.3	859.0	3326.0	69.0			189.8	896.0	1.7
5-W	10/30/13	21344	7.0	8.2	968.0	2074.0	60.0	7.1	1.4	17.4	370.0	65.9
5-Th	10/31/13	22047	7.6	8.9	842.0	2041.0	65.0					
Minimum			6.3		448							
			>= 6.0		Report Only							
Average		33820.4					71.2903	28.64	2.08	84.8182	657.182	170.727
		<= 210000					Report Only	Report Only	Report Only	<= 350	Report Only	<= 3240
Maximum		69644		9.1		3644	78	62	3.3	914.4	1330	511.1
		<= 300000		<= 11.0		Report Only	Report Only	<= 300	<= 100	Report Only	Report Only	<= 4560



Week	Monitoring Point	Sodium Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sodium Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Nitrate Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Alkalinity Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Calcium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)
1-T	10/1/13	99.2	24.5	40.6	10.1	6.2	1.5	243.4	60.2			
1-W	10/2/13	95.9	20.8	41.2	9.0	7.3	1.6	224.6	48.8	26.5	55.8	86.0
1-Th	10/3/13	102.7	31.2	38.9	11.8	8.1	2.5	210.8	64.0			
1-F	10/4/13	104.0	49.3	38.1	18.1	8.3	4.0	202.0	95.8			
1-Sa	10/5/13											
2-Su	10/6/13											
2-M	10/7/13	105.9	41.8	44.3	17.5	5.8	2.3	237.6	93.8			
2-T	10/8/13	97.7	56.3	38.8	22.4	5.1	3.0	182.8	105.3			
2-W	10/9/13	79.9	33.8	37.0	15.7	4.2	1.8	134.7	57.0	4.5		
2-Th	10/10/13	66.6	8.0	17.9	2.1	2.6	0.3	35.3	4.2			
2-F	10/11/13	100.9	52.7	38.9	20.3	9.2	4.8	108.0	56.4			
2-Sa	10/12/13											
3-Su	10/13/13											
3-M	10/14/13	109.9	24.0	38.0	8.3	6.6	1.4	299.0	65.2			
3-T	10/15/13	91.9	4.1	25.2	1.1	5.1	0.2	135.0	6.1			
3-W	10/16/13	103.9	18.8	23.1	4.2	3.4	0.6	136.0	24.6	2.0		
3-Th	10/17/13	85.4	17.5	20.1	4.1	3.5	0.7	69.1	14.1			
3-F	10/18/13	139.9	57.6	42.6	17.5	15.3	6.3	230.0	94.6			
3-Sa	10/19/13											
4-Su	10/20/13											
4-M	10/21/13	295.0	22.1	39.3	2.9	11.3	0.8	530.0	39.7			
4-T	10/22/13	184.8	37.0	101.2	20.3	11.2	2.2	131.0	26.3			
4-W	10/23/13	204.3	38.5	44.5	8.4	11.7	2.2	348.4	65.6	29.0		
4-Th	10/24/13	165.4	96.0	39.0	22.7	10.4	6.0	310.9	180.6			
4-F	10/25/13	122.3	27.1	28.9	6.4	6.6	1.5	203.6	45.0			
4-Sa	10/26/13											
5-Su	10/27/13											
5-M	10/28/13	158.8	33.1	40.1	8.3	10.2	2.1	366.3	76.4			
5-T	10/29/13	171.6	0.3	86.1	0.2	6.6	0.0	124.8	0.2			
5-W	10/30/13	66.3	11.8	18.9	3.4	2.9	0.5	56.9	10.1	0.5		
5-Th	10/31/13											
Minimum												
Average		125.105	32.1045	40.1227	10.6727	7.34545	2.10455	205.464	56.0909	12.5		
	Report Only		<= 558	Report Only	<= 63	Report Only	<= 28	Report Only	Report Only	Report Only		
Maximum		295	96	101.2	22.7	15.3	6.3	530	180.6	29	55.8	86
	Report Only		<= 796	Report Only	<= 90	Report Only	<= 46	Report Only	Report Only	Report Only	Report Only	Report Only



Week	Monitoring Point	Magnesium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Manganese Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Ammonia Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Phosphorus Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Potassium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Standard Units 2/Month Grab	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Sodium Total Milligrams/L (mg/L) 2/Month Grab	Chloride Total Milligrams/L (mg/L) 2/Month Grab
		001	001	001	001	001	002	003	003	003	003	003
1-T	10/1/13							C				
1-W	10/2/13	4.3	28.2	3.5	0.1	8.4	324.0	C	9.1	456.0	130.7	32.2
1-Th	10/3/13							C				
1-F	10/4/13							C				
1-Sa	10/5/13							296770				
2-Su	10/6/13							754462				
2-M	10/7/13							755585				
2-T	10/8/13							735860				
2-W	10/9/13						414.0	227407	9.7	466.0	94.8	28.1
2-Th	10/10/13							C				
2-F	10/11/13							461900				
2-Sa	10/12/13							291486				
3-Su	10/13/13							C				
3-M	10/14/13							C				
3-T	10/15/13							C				
3-W	10/16/13							C				
3-Th	10/17/13							C				
3-F	10/18/13							C				
3-Sa	10/19/13							C				
4-Su	10/20/13							C				
4-M	10/21/13							C				
4-T	10/22/13							C				
4-W	10/23/13							C				
4-Th	10/24/13							C				
4-F	10/25/13							C				
4-Sa	10/26/13							C				
5-Su	10/27/13							C				
5-M	10/28/13							C				
5-T	10/29/13							C				
5-W	10/30/13							C				
5-Th	10/31/13							C				
Minimum									9.1			
									Report Only			
Average							369	503353		461	112.75	30.15
							Report Only	Report Only		Report Only	Report Only	Report Only
Maximum		4.3	28.2	3.5	0.1	8.4	414	755585	9.7	466	130.7	32.2
		Report Only	Report Only	Report Only	Report Only	Report Only	<= 2500	Report Only	Report Only	Report Only	Report Only	Report Only

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[illegible]



Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment001 Total flow 1,048,432 gallons.
October 31st no sample.

002 Maximum flow = 56 gpm

003 October 2nd copper = 19.2ug/L
October 9th copper = 35.8 ug/L**Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE POTW, DUNES TREATMENT PLANT**

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
HSHS	All Parameters		C	No discharge for the month.
HCEP	All Parameters		C	No discharge for the month.

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 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 fine and imprisonment for knowing violations.

Paul Stenhouse

Signature

11/13/2013 1:43:46 PM

Date



Permit Number: ST0008121

Permittee: REC Solar Grade Silicon

Facility County: Grant

Receiving Waterbody:

Monitoring Period: 11/01/2013 - 11/30/2013

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE
POTW, DUNES TREATMENT PLANT

Version: 1

Week	Monitoring Point	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Temperature Measured Degrees F Continuous Metered/Recorded	Total BOD5 Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Oil & Grease Total recoverable, FOG, HEM Milligrams/L (mg/L) Weekly Grab	Total Suspended Solids (TSS) Total suspended (TSS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)
1-F	11/1/13	43165	7.8	8.6	903.0	1362.0	70.0			13.8	396.0	142.5
1-Sa	11/2/13	44937	7.1	7.8	1277.0	1369.0	72.0			16.9	608.0	227.9
2-Su	11/3/13	24086	6.7	7.7	1295.0	1539.0	70.0			28.9	596.0	119.7
2-M	11/4/13	470	7.2	8.7	428.0	1655.0	60.0					
2-T	11/5/13	25232	6.9	8.7	513.0	1506.0	68.0			16.3	502.0	105.6
2-W	11/6/13	21975	6.6	7.7	1504.0	1759.0	70.0	5.0	1.4	9.4	512.0	93.8
2-Th	11/7/13	23437	7.1	7.5	1479.0	2518.0	65.0			8.6	398.0	77.8
2-F	11/8/13	24466	6.8	7.3	2234.0	2604.0	71.0			167.8	1200.0	244.9
2-Sa	11/9/13	45675	7.3	7.6	2026.0	2353.0	70.0					
3-Su	11/10/13	59137	7.5	8.8	1763.0	2143.0	70.0					
3-M	11/11/13	18158	7.6	8.2	1658.0	1972.0	68.0			52.6	982.0	148.7
3-T	11/12/13	22607	7.4	7.6	1555.0	1755.0	66.0			30.7	732.0	138.0
3-W	11/13/13	22383	6.9	7.6	1130.0	1781.0	68.0	9.6	1.4	47.4	708.0	132.1
3-Th	11/14/13	33401	7.1	7.9	949.0	1158.0	64.0			29.6	618.0	172.2
3-F	11/15/13	21921	7.5	7.9	946.0	1003.0	60.0			20.2	456.0	83.4
3-Sa	11/16/13	10144	7.0	7.7	991.0	1086.0	60.0					
4-Su	11/17/13	18734	6.6	7.6	944.0	1158.0	66.0			7.1	354.0	55.3
4-M	11/18/13	45040	6.4	7.9	747.0	944.0	70.0			25.7	634.0	238.1
4-T	11/19/13	42847	6.9	7.9	738.0	840.0	69.0			32.8	640.0	228.7
4-W	11/20/13	3810	6.3	7.3	782.0	873.0	62.0	5.1	1.4	480.0	11.4	0.4
4-Th	11/21/13	42145	6.5	8.2	756.0	932.0	66.0			32.4	758.0	266.4
4-F	11/22/13	388	7.0	8.4	840.0	1027.0	62.0					
4-Sa	11/23/13	43808	7.2	9.3	816.0	949.0	68.0					
5-Su	11/24/13	570	6.5	9.5	865.0	1019.0	65.0					
5-M	11/25/13	42235	6.5	9.5	784.0	956.0	62.0	59.2	1.4	86.8	672.0	236.7
5-T	11/26/13	21790	8.8	9.5	809.0	1013.0	65.0			54.9	350.0	63.6
5-W	11/27/13	43724	8.0	9.4	811.0	1012.0	69.0			57.1	552.0	201.3
5-Th	11/28/13	45858	7.5	8.4	863.0	1253.0	68.0			45.0	728.0	278.4
5-F	11/29/13	42915	7.1	8.2	356.0	1449.0	68.0			14.0	912.0	326.4
5-Sa	11/30/13	23110	6.1	7.4	1126.0	1520.0	72.0					
Minimum			6.1		356							
			>= 6.0		Report Only							
Average		28605.6					66.8	19.725	1.4	58.0909	605.427	162.814
		<= 210000					Report Only	Report Only	Report Only	<= 350	Report Only	<= 3240
Maximum		59137		9.5		2604	72	59.2	1.4	480	1200	326.4
		<= 300000		<= 11.0		Report Only	Report Only	<= 300	<= 100	Report Only	Report Only	<= 4560



Week	Monitoring Point	Sodium Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sodium Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Nitrate Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Alkalinity Total Monthly Composite Sample (24 HR Time Proportional comp)	Calcium Total Monthly Composite Sample (24 HR Time Proportional comp)
1-F	11/1/13	81.1	29.2	23.3	8.4	3.3	1.2	94.1	33.9			
1-Sa	11/2/13	137.9	51.7	35.8	13.4	3.9	1.5	256.8	96.3			
2-Su	11/3/13	133.5	26.8	35.5	7.1	5.3	1.1	224.8	45.1			
2-M	11/4/13											
2-T	11/5/13	91.1	19.2	29.5	6.2	4.5	0.9	170.8	36.0			
2-W	11/6/13	74.4	13.7	22.8	4.2	3.4	0.6	107.4	19.7	10.5	130.0	35.2
2-Th	11/7/13	77.2	15.1	21.5	4.2	3.2	0.6	88.0	17.2			
2-F	11/8/13	165.0	33.6	42.0	8.6	9.4	1.9	308.5	63.0			
2-Sa	11/9/13											
3-Su	11/10/13											
3-M	11/11/13	184.2	27.9	30.6	4.6	5.7	0.9	338.7	51.3			
3-T	11/12/13	124.3	23.5	29.0	5.5	5.4	1.0	185.5	35.0			
3-W	11/13/13	117.6	21.9	29.1	5.4	5.5	1.0	206.4	38.5	27.2		
3-Th	11/14/13	108.8	30.3	31.3	8.7	6.1	1.7	202.9	56.5			
3-F	11/15/13	86.2	15.8	22.1	4.0	3.8	0.7	101.4	18.6			
3-Sa	11/16/13											
4-Su	11/17/13	78.1	12.2	19.4	3.0	3.3	0.5	64.6	10.1			
4-M	11/18/13	109.8	41.3	30.9	11.6	6.3	2.4	191.1	71.8			
4-T	11/19/13	104.3	37.3	32.5	11.7	5.7	2.0	259.2	92.7			
4-W	11/20/13	84.1	2.6	22.5	0.7	3.9	0.1	110.4	3.5	4.4		
4-Th	11/21/13	123.4	43.4	35.1	12.3	4.3	1.5	333.3	117.1			
4-F	11/22/13											
4-Sa	11/23/13											
5-Su	11/24/13											
5-M	11/25/13	126.4	44.5	37.4	13.2	5.0	1.8	253.2	89.2	3.5		
5-T	11/26/13	82.6	15.0	21.7	4.0	2.7	0.5	85.2	15.5			
5-W	11/27/13	99.0	36.1	22.8	8.3	3.7	1.3	113.7	41.5			
5-Th	11/28/13	150.3	57.4	28.2	10.8	6.8	2.6	292.3	111.8			
5-F	11/29/13	145.0	51.9	29.6	10.6	7.2	2.6	335.5	120.1			
5-Sa	11/30/13											
Minimum												
Average		112.923	29.5636	28.7545	7.56818	4.92727	1.29091	196.536	53.8364	11.4		
		Report Only	<= 558	Report Only	<= 63	Report Only	<= 28	Report Only	Report Only	Report Only		
Maximum		184.2	57.4	42	13.4	9.4	2.6	338.7	120.1	27.2	130	35.2
		Report Only	<= 796	Report Only	<= 90	Report Only	<= 46	Report Only	Report Only	Report Only	Report Only	Report Only



Week	Monitoring Point	Magnesium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Manganese Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Ammonia Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Phosphorus Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Potassium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Standard Units 2/Month Grab	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Sodium Total Milligrams/L (mg/L) 2/Month Grab	Chloride Total Milligrams/L (mg/L) 2/Month Grab
		001	001	001	001	001	002	003	003	003	003	003
1-F	11/1/13											
1-Sa	11/2/13											
2-Su	11/3/13											
2-M	11/4/13											
2-T	11/5/13											
2-W	11/6/13	2.9	15.6	0.3	0.2	7.7	378.0					
2-Th	11/7/13											
2-F	11/8/13											
2-Sa	11/9/13											
3-Su	11/10/13											
3-M	11/11/13											
3-T	11/12/13											
3-W	11/13/13											
3-Th	11/14/13											
3-F	11/15/13											
3-Sa	11/16/13											
4-Su	11/17/13											
4-M	11/18/13											
4-T	11/19/13											
4-W	11/20/13						348.0					
4-Th	11/21/13											
4-F	11/22/13											
4-Sa	11/23/13											
5-Su	11/24/13											
5-M	11/25/13											
5-T	11/26/13											
5-W	11/27/13											
5-Th	11/28/13											
5-F	11/29/13											
5-Sa	11/30/13											
Minimum									Report Only			
Average							363					
							Report Only	Report Only		Report Only	Report Only	Report Only
Maximum		2.9	15.6	0.3	0.2	7.7	378					
		Report Only	Report Only	Report Only	Report Only	Report Only	<= 2500	Report Only	Report Only	Report Only	Report Only	Report Only

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Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

001 Outfall

Total Flow 858,168 gallons

No sample Nov. 4th so Sunday's sample used (11-3-13)

No sample Nov. 22nd so Sunday's sample used (11-17-13)

No exceedences.

002 Outfall

No exceedences.

Maximum flow 64 gpm.

Monitor wells

No comments

004 Outfall

No comments

003 Irrigation Outfall

No Discharge

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE POTW, DUNES TREATMENT PLANT

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
003	All Parameters		C	No discharge
HSHS	All Parameters		C	No discharge
HCEP	All Parameters		C	No discharge

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 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 fine and imprisonment for knowing violations.

Paul Stenhouse

Signature

12/13/2013 9:27:59 AM

Date



Permit Number: ST0008121

Permittee: REC Solar Grade Silicon

Facility County: Grant

Receiving Waterbody:

Monitoring Period: 12/01/2013 - 12/31/2013

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE
POTW, DUNES TREATMENT PLANT

Version: 1

Week	Monitoring Point	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Conductivity (Specific Conductance) Micromhos/cm Continuous Metered/Recorded	Temperature Measured Degrees F Continuous Metered/Recorded	Total BOD5 Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Oil & Grease Total recoverable, FOG, HEM Milligrams/L (mg/L) Weekly Grab	Total Suspended Solids (TSS) Total suspended (TSS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)
1-Su	12/1/13	443	6.4	7.2	1270.0	1441.0	68.0					
1-M	12/2/13	26734	6.1	7.9	1083.0	1443.0	64.0			41.5	540.0	120.4
1-T	12/3/13	21778	7.1	8.3	418.0	1192.0	67.0			29.9	858.0	155.8
1-W	12/4/13	22392	6.7	9.2	173.0	1407.0	64.0	5.0	1.4	6.6	230.0	42.9
1-Th	12/5/13	4614	8.2	9.4	969.0	1328.0	65.0			33.9	756.0	29.1
1-F	12/6/13	43724	8.4	9.4	959.0	1198.0	67.0			42.9	868.0	316.6
1-Sa	12/7/13	52051	7.9	8.5	960.0	1020.0	64.0					
2-Su	12/8/13	39766	7.9	8.8	889.0	991.0	64.0					
2-M	12/9/13	26582	7.7	8.8	890.0	947.0	65.0			17.6	834.0	184.9
2-T	12/10/13	38635	8.1	8.7	892.0	936.0	63.0			13.9	798.0	257.1
2-W	12/11/13	26108	8.3	8.8	869.0	895.0	63.0	11.6	1.4	25.7	866.0	188.6
2-Th	12/12/13	34412	8.3	8.9	816.0	1020.0	66.0			10.0	690.0	198.0
2-F	12/13/13	7886	7.1	8.8	942.0	1099.0	66.0			24.8	720.0	47.4
2-Sa	12/14/13	20873	8.6	8.8	835.0	1012.0	65.0					
3-Su	12/15/13	21435	8.0	8.9	810.0	1050.0	65.0					
3-M	12/16/13	43324	8.0	8.9	878.0	952.0	64.0			21.4	738.0	266.7
3-T	12/17/13	46049	7.5	8.6	952.0	1134.0	68.0			17.0	754.0	289.6
3-W	12/18/13	23240	7.3	8.4	1011.0	1233.0	68.0	5.2	1.4	15.2	940.0	182.2
3-Th	12/19/13	46657	7.9	8.6	898.0	1104.0	68.0			16.5	956.0	372.0
3-F	12/20/13	55495	7.7	8.3	885.0	998.0	65.0			20.3	778.0	360.1
3-Sa	12/21/13	26648	6.9	9.0	815.0	968.0	70.0					
4-Su	12/22/13	20793	8.3	9.1	865.0	998.0	70.0					
4-M	12/23/13	22940	8.2	8.6	958.0	1052.0	70.0			9.2	496.0	94.9
4-T	12/24/13	21396	8.0	8.6	1000.0	1179.0	72.0			6.0	456.0	81.3
4-W	12/25/13	24282	8.0	8.6	1151.0	1599.0	71.0			7.5	684.0	138.5
4-Th	12/26/13	47753	7.6	8.1	1366.0	1683.0	70.0	8.2	2.2	20.6	1232.0	490.7
4-F	12/27/13	22805	7.4	8.0	1183.0	1420.0	72.0			11.6	722.0	137.3
4-Sa	12/28/13	4639	6.6	7.9	1345.0	1548.0	64.0					
5-Su	12/29/13	35216	7.7	8.1	1078.0	1367.0	70.0					
5-M	12/30/13	35926	7.9	8.1	1099.0	1263.0	70.0	27.7	2.8	18.4	866.0	259.5
5-T	12/31/13	40414	7.6	8.1	1077.0	1226.0	70.0			26.6	942.0	317.5
Minimum			6.1		173							
			>= 6.0		Report Only							
Average		29193.9					67.0323	11.54	1.84	19.8682	760.182	205.959
		<= 210000					Report Only	Report Only	Report Only	<= 350	Report Only	<= 3240
Maximum		55495		9.4		1683	72	27.7	2.8	42.9	1232	490.7
		<= 300000		<= 11.0		Report Only	Report Only	<= 300	<= 100	Report Only	Report Only	<= 4560



Week	Monitoring Point	Sodium Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sodium Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Chloride Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Fluoride Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Milligrams/L (mg/L) 5/Week Composite Sample (24 HR Time Proportional comp)	Sulfate Total Lbs/Day 5/Week Composite Sample (24 HR Time Proportional comp)	Nitrate Total Milligrams/L (mg/L) Weekly Composite Sample (24 HR Time Proportional comp)	Alkalinity Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Calcium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)
001	001	001	001	001	001	001	001	001	001	001	001	001
1-Su	12/1/13											
1-M	12/2/13	127.4	28.4	29.3	6.5	5.0	1.1	213.8	47.6			
1-T	12/3/13	138.7	25.2	32.0	5.8	6.0	1.1	278.4	50.5			
1-W	12/4/13	87.8	16.4	18.9	3.5	3.0	0.6	74.3	13.9	7.3	156.0	23.2
1-Th	12/5/13	158.7	6.1	30.6	1.2	4.5	0.2	220.5	8.5			
1-F	12/6/13	174.3	63.5	30.6	11.2	4.1	1.5	272.2	99.3			
1-Sa	12/7/13											
2-Su	12/8/13											
2-M	12/9/13	128.4	28.4	28.7	6.4	2.3	0.5	326.5	72.4			
2-T	12/10/13	127.8	41.2	29.0	9.3	2.3	0.7	317.6	102.4			
2-W	12/11/13	139.6	30.4	30.6	6.7	3.9	0.9	296.5	64.5	12.3		
2-Th	12/12/13	119.7	34.3	26.8	7.7	3.3	1.0	224.7	64.5			
2-F	12/13/13	124.7	8.2	29.2	1.9	3.8	0.3	257.0	16.9			
2-Sa	12/14/13											
3-Su	12/15/13											
3-M	12/16/13	119.3	43.1	34.6	12.5	5.1	1.8	216.2	78.1			
3-T	12/17/13	118.5	45.5	34.0	13.1	8.2	3.2	169.5	65.1			
3-W	12/18/13	107.6	20.9	32.9	6.4	13.7	2.6	116.8	22.7	89.1		
3-Th	12/19/13	109.5	42.6	32.3	12.6	13.0	5.0	111.5	43.4			
3-F	12/20/13	121.2	56.1	31.9	14.8	9.6	4.5	128.2	59.4			
3-Sa	12/21/13											
4-Su	12/22/13											
4-M	12/23/13	114.3	21.9	25.2	4.9	4.9	0.9	87.7	16.8			
4-T	12/24/13	95.8	17.1	24.9	4.5	3.9	0.7	64.0	11.4			
4-W	12/25/13	105.7	21.4	26.4	5.4	4.5	0.9	74.8	15.2			
4-Th	12/26/13	147.1	58.6	37.0	14.7	5.8	2.3	119.3	47.5	160.0		
4-F	12/27/13	112.7	21.4	27.4	5.2	3.8	0.7	83.8	15.9			
4-Sa	12/28/13											
5-Su	12/29/13											
5-M	12/30/13	109.3	32.8	33.2	9.9	4.2	1.3	123.6	37.1	94.3		
5-T	12/31/13	126.4	42.6	33.0	11.1	4.7	1.6	136.3	46.0			
Minimum												
Average		123.386	32.0955	29.9318	7.96818	5.43636	1.51818	177.873	45.4136	72.6		
	Report Only	<= 558	Report Only	<= 63	Report Only	<= 28	Report Only	Report Only	Report Only	Report Only		
Maximum		174.3	63.5	37	14.8	13.7	5	326.5	102.4	160	156	23.2
	Report Only	<= 796	Report Only	<= 90	Report Only	<= 46	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only



Week	Monitoring Point	Magnesium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Manganese Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Ammonia Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Phosphorus Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Potassium Total Milligrams/L (mg/L) Monthly Composite Sample (24 HR Time Proportional comp)	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Flow Gallons/Day (gpd) Continuous Metered/Recorded	pH Standard Units 2/Month Grab	Total Dissolved Solids Total Dissolved Solids (TDS) Milligrams/L (mg/L) 2/Month Grab	Sodium Total Milligrams/L (mg/L) 2/Month Grab	Chloride Total Milligrams/L (mg/L) 2/Month Grab
1-Su	12/1/13											
1-M	12/2/13											
1-T	12/3/13											
1-W	12/4/13	2.9	4.4	0.2	0.2	7.7	274.0					
1-Th	12/5/13											
1-F	12/6/13											
1-Sa	12/7/13											
2-Su	12/8/13											
2-M	12/9/13											
2-T	12/10/13											
2-W	12/11/13											
2-Th	12/12/13											
2-F	12/13/13											
2-Sa	12/14/13											
3-Su	12/15/13											
3-M	12/16/13											
3-T	12/17/13											
3-W	12/18/13						166.0					
3-Th	12/19/13											
3-F	12/20/13											
3-Sa	12/21/13											
4-Su	12/22/13											
4-M	12/23/13											
4-T	12/24/13											
4-W	12/25/13											
4-Th	12/26/13											
4-F	12/27/13											
4-Sa	12/28/13											
5-Su	12/29/13											
5-M	12/30/13											
5-T	12/31/13											
Minimum									Report Only			
Average							220					
							Report Only	Report Only		Report Only	Report Only	Report Only
Maximum		2.9	4.4	0.2	0.2	7.7	274					
		Report Only	Report Only	Report Only	Report Only	Report Only	<= 2500	Report Only	Report Only	Report Only	Report Only	Report Only

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]



Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Process 001

Total flow 905,010

No Exceedences.

Sanitary Sewer 002

Maximum flow 60gpm

No exceedences.

Groundwater Monitoring

No comment.

Irrigated Effluent 003

No water applied to field.

Outfall 004

No comments.

Outfall: 001 - DISCHARGE TO CITY OF MOSES LAKE POTW, DUNES TREATMENT PLANT

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
003	All Parameters		C	No water applied to field.
HSHS	All Parameters		C	
HCEP	All Parameters		C	

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 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 fine and imprisonment for knowing violations.

Paul Stenhouse

Signature

1/13/2014 7:14:34 AM

Date

MASTER SITE PLAN

ALL CHANGES TO THIS DOCUMENT MUST BE REFLECTED ON ANY ASSOCIATED DWG'S. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, THOSE DWG'S SHOWN IN THE TABLE TO THE RIGHT.

HANDS ON AND ELECTRONIC DWG'S OTHER THAN THOSE SHOWN MAY ALSO EXIST THAT PROVIDE ADDITIONAL DETAILS. SEE THE ENGINEERING RECORD CENTER FOR VERIFICATION.

FILE NAME	FILE NUMBER	FILE NAME	FILE NUMBER
10004394	1	10004394	1
10004394	2	10004394	2
10004394	3	10004394	3
10004394	4	10004394	4
10004394	5	10004394	5
10004394	6	10004394	6
10004394	7	10004394	7
10004394	8	10004394	8
10004394	9	10004394	9
10004394	10	10004394	10
10004394	11	10004394	11
10004394	12	10004394	12
10004394	13	10004394	13
10004394	14	10004394	14
10004394	15	10004394	15

PROJECT NUMBER	DRAWN BY	CHECKED BY	DATE	REVISION	SHEET NO.	NO. OF SH.
10004394	BBG	BBG	06/94	20	1	2

REC SILICON INC.
MOSES LAKE, WASHINGTON

TITLE

**POLYSILICON PLANT
MOSES LAKE, WA
MASTER SITE PLAN**

AREA	ZONE	SITE	SUBJECT	FILE NAME	DRAWING NUMBER
GS	00	GS00	0.11	1C002051	1-C-00205

NO.	REVISIONS	BY	CKD.	APPD	DATE	NO.	REVISIONS	BY	CKD.	APPD	DATE	REFERENCES	NO.	ISSUED FOR	TRANSMITTAL
11	PLAN AS OF 10-25-06 W.O. 58079 (W.I.P. EXPANSION 2007)	KJM	KJM	JSJ	10/06	16	ADDED A FEW MORE MISSING DETAILS	BBG	BBG	JAH	01/10	SEE NOTE BLOCK ABOVE			
12	ADD 1Z000071 & 1Z000081 TO TABLE OF ASSOCIATED DWG.'S	KJM	CS	CS	4/07	17	AD FIRESTATION, VAULT AND GUARD SHACK VAULT-FIBER	BBG	BBG	JAL	08/11	SEE AREA ZONE ("Z") DRAWINGS FOR DETAILS			
13	GUARD HOUSE #2 & PARKING LOT REVISIONS PER W.O. 236508	KJM	SEI	JBT	3/09	18	REV. PER REDLINE 112811-001-ADDED H2 TRANS. COMPRESSOR	PJT	SEI	JAL	01/12				
14	ADDED 60 MILLION GALLON POND AND VARIOUS UPDATES	BBG	BBG	JSJ	11/09	19	ADD DRYING PADS PER ML-000352	BBG	BRG	JAL	01/12				
15	ADDED UPGRADES TO SHOW PLANT 3.0 AND 60 MIL. GAL. POND	BBG	GMF	JSJ	11/09	20	CORRECTION TO EQUIP. NUMBERING IN PLANT 4 WW AREA	KRB	BBG	JAL	04/13				

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NEITHER THIS DOCUMENT NOR ANY INFORMATION
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OF REC SILICON INC.

NO.	REVISIONS	BY	KCD.	APPD	DATE	NO.	REVISIONS	BY	KCD.	APPD	DATE	REFERENCES	NO.	ISSUED FOR	TRANSMITTAL
11	PLAN AS OF 10-25-06 W.O. 58079 (W.I.P. EXPANSION 2007)	KJM	KJM	JSJ	10/06	16	ADDED A FEW MORE MISSING DETAILS	BBG	BBG	JAH	01/10	SEE NOTE BLOCK ABOVE			
12	ADD 12000071 & 12000081 TO TABLE OF ASSOCIATED DWG.'S	KJM	CS	CS	4/07	17	AD FIRESTATION, VAULT AND GUARD SHACK VAULT-FIBER	BBG	BBG	JAL	08/11	SEE AREA ZONE ("Z") DRAWINGS FOR DETAILS			
13	GUARD HOUSE #2 & PARKING LOT REVISIONS PER W.O. 236508	KJM	SEI	JBT	3/09	18	REV. PER REDLINE 112811-001-ADDED H2 TRANS. COMPRESSOR	PJT	SEI	JAL	01/12				
14	ADDED 60 MILLION GALLON POND AND VARIOUS UPDATES	BBG	BBG	JSJ	11/09	19	ADD DRYING PADS PER ML-000352	BBG	BBG	JAL	01/12				
15	ADDED UPGRADES TO SHOW PLANT 3.0 AND 60 MIL. GAL. POND	BBG	GMF	JSJ	11/09	20	CORRECTION TO EQUIP. NUMBERING IN PLANT 4 WW AREA	KRB	BBG	JAL	04/13				

PROJECT NUMBER	DRAWN BY	CHECKED BY	DATE	REVISION	SHEET NO.	NO. OF SH.
10004394	BBG	BBG	06/94	20	1	2
<p>REC SILICON INC. MOSES LAKE, WASHINGTON</p>						
<p>TITLE</p> <p>POLYSILICON PLANT MOSES LAKE, WA MASTER SITE PLAN</p>						
AREA	ZONE	SITE	SUBJECT	FILE NAME	DRAWING NUMBER	
GS	00	GS00	0.11	1C002051	1-C-00205	

PROJECT NUMBER	DATE	STATION	REMARKS (E)	DATE OF DAY
ASHM	07/22/08	2	1	1

REC SULAR GRADE SUCCON LLC
 MOSES LAKE, WASHINGTON

STORM WATER MAP
 PLOT PLAN

AREA	ZONE	TYPE	IMPACT	FILE NAME	SYSTEM NUMBER
00				DEP000001	00-P-000001

[illegible]