



Handwritten:
COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

June 29, 2010

Mr. Travis Skidmore
REC Solar Grade Silicon, Inc.
3322 Road 'N' NE
Moses Lake, WA 98837

Dear Mr. Skidmore:

RE: Issuance of State Waste Discharge Permit No. ST-8121 – REC Solar Grade Silicon

Your State Wastewater Discharge Permit No. ST-8121 is enclosed. The Department of Ecology issues this permit in accordance with Chapter 90.48 RCW, as amended.

In accordance with WAC 173-216-090, a legal notice of application was published for two consecutive weeks in a newspaper of general circulation in the county of the proposal. A legal notice of draft permit was published on May 12, 2010 in the Columbia Basin Herald.

Permit Fees

The Department of Ecology, in response to the passage of Initiative 97 in 1988, has adopted a regulation to recover costs associated with issuing and administering wastewater discharge permits (Chapter 173-224 WAC).

The annual fee for both industrial and municipal/domestic discharges is computed according to the permit fee schedules contained in WAC 173-224-040. We notify permit holders of fee charges by mailed billing statements. Failure to pay the applicable permit fee may result in the suspension or revocation of the permit, and could result in the issuance of civil penalties or actions to enjoin the activity under the permit.

Appeal Process

You have the right to appeal this permit within thirty (30) days upon receipt of this document. Pursuant to chapter 43.21B RCW, your appeal must be filed with the Pollution Control Hearings Board, and served on the Department of Ecology, within thirty (30) days of the date of your receipt of this document.

If you choose to appeal this action or decision, your notice of appeal must contain: (1) A copy of the permit you are appealing, and (2) A copy of the application for the permit.



Y9100
Mr. Travis Skidmore
June 29, 2010
Page 2 of 2

Your appeal must be filed with:

The Pollution Control Hearings Board
4224 - 6th Avenue SE, Rowe Six, Bldg. 2
P.O. Box 40903
Lacey, Washington 98504-0903

Your appeal must also be served on:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, Washington 98504-7608

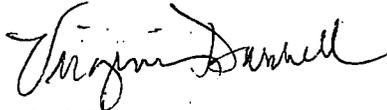
In addition, please send a copy of your appeal to:

Mr. Pat Hallinan
Department of Ecology
4601 N. Monroe Street
Spokane, WA 99205

Please direct any questions and/or correspondence relating to the permit to Pat Hallinan (Facility Manager) at (509) 329-3500, by email at phal461@ecy.wa.gov or by writing to the above address.

You must file an application for renewal with this Department at least 180 days prior to the expiration date of this permit.

Sincerely,



Virginia Darrell, P.E.
Permit Unit Supervisor
Water Quality Program

CERTIFIED MAIL (7009 1410 0000 1368 8288)

VD:slt
Enclosures

cc: Kent Stephens, REC Solar Grade Silicon
Bruce Loranger, US Bureau of Reclamation
Tim Varney, City of Moses Lake
Paul Kampmeier, Smith & Lowney
Gregory S. McElroy, McElroy Law Firm
Elayne Fuller, E. Columbia Irrigation Dist.
Stephanie Shopbell, S. Columbia Irrigation Dist.
Betsy Jordan, Quincy-Columbia Irrigation Dist.
~~Bey Boston, Ecology/Permit Fee Unit~~
Pat Hallinan, Ecology/Eastern Region



COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

December 6, 2010

Mr. Travis Skidmore
REC Solar Grade Silicon, Inc.
3322 Road "N" NE
Moses Lake, WA 98837

Dear Mr. Skidmore:

RE: Issuance of Modified State Waste Discharge Permit No. ST-8121 – REC Solar Grade Silicon

Your modified State Wastewater Discharge Permit No. ST-8121 is enclosed. The Department of Ecology issues this permit in accordance with Chapter 90.48 RCW, as amended.

A legal notice of draft permit modification was published on October 5, 2010 in the Columbia Basin Herald to inform the public that a modified draft permit and fact sheet were available for review.

Permit Fees

The Department of Ecology, in response to the passage of Initiative 97 in 1988, has adopted a regulation to recover costs associated with issuing and administering wastewater discharge permits (Chapter 173-224 WAC).

The annual fee for both industrial and municipal/domestic discharges is computed according to the permit fee schedules contained in WAC 173-224-040. We notify permit holders of fee charges by mailed billing statements. Failure to pay the applicable permit fee may result in the suspension or revocation of the permit, and could result in the issuance of civil penalties or actions to enjoin the activity under the permit.

Appeal Process

You have the right to appeal this permit within thirty (30) days upon receipt of this document. Pursuant to chapter 43.21B RCW, your appeal must be filed with the Pollution Control Hearings Board, and served on the Department of Ecology, within thirty (30) days of the date of your receipt of this document.

If you choose to appeal this action or decision, your notice of appeal must contain: (1) A copy of the permit you are appealing, and (2) A copy of the application for the permit.



Y9903

Mr. Travis Skidmore

December 6, 2010

Page 2 of 2

Your appeal must be filed with:

The Pollution Control Hearings Board
4224 - 6th Avenue SE, Rowe Six, Bldg. 2
P.O. Box 40903
Lacey, Washington 98504-0903

Your appeal must also be served on:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, Washington 98504-7608.

In addition, please send a copy of your appeal to:

Mr. Pat Hallinan
Department of Ecology
4601 N. Monroe Street
Spokane, WA 99205

Please direct any questions and/or correspondence relating to the permit to Pat Hallinan (Facility Manager) at (509) 329-3500 or by writing to the above address.

You must file an application for renewal with this Department at least 180 days prior to the expiration date of this permit.

Sincerely,



Virginia Darrell, P.E.
Permit Unit Supervisor
Water Quality Program

CERTIFIED MAIL (7009 1410 0000 1368 9070)

VD:slt

Enclosures

cc: Kent Stephens, REC Solar Grade Silicon
Gina Hoff, US Bureau of Reclamation
Tim Varney, City of Moses Lake
Paul Kampmeier, Smith & Lowney
Gregory S. McElroy, McElroy Law Firm
Elayne Fuller, East Columbia Irrigation District
Stephanie Shopbell, South Columbia Irrigation District
Betsy Jordan, Quincy-Columbia Irrigation District
~~Bev Poston, Ecology/Permit Rec Unit~~
Pat Hallinan, Ecology/Eastern Region

Issuance Date: June 28, 2010
Effective Date: July 1, 2010
Amended Date: December 1, 2010
Expiration Date: June 30, 2015

STATE WASTE DISCHARGE PERMIT NUMBER ST 8121

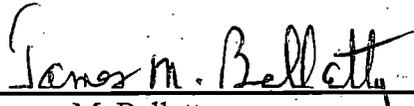
STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Eastern Regional Office

In compliance with the provisions of the
State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington, as amended,

REC Solar Grade Silicon, LLC
3322 Road "N" NE
Moses Lake, WA 98837

is authorized to discharge wastewater in accordance with the special and general conditions
which follow.

<u>Facility Location:</u> 3322 Road "N" NE, Moses Lake, WA 98837	<u>Publicly Owned Treatment Works (POTW) Receiving Discharge:</u> Outfall 001 – City of Moses Lake POTW, Dunes Treatment Plant
<u>Discharge Location:</u> Outfall 003 - 125 acres within the NW¼ of Section 17, Township 19 N., Range 29 E., Grant County	Latitude: 47.135556 N Longitude: 119.2 W
<u>Industry Type:</u> Production of High Purity Polysilicon and Silane Gas	Significant Industrial User
<u>SIC Code:</u> Primary 3339, Secondary 2819	



James M. Bellatty
Water Quality Section Manager
Eastern Regional Office
Washington State Department of Ecology

TABLE OF CONTENTS

SUMMARY OF PERMIT REPORT SUBMITTALS.....	4
SPECIAL CONDITIONS	
S1. DISCHARGE LIMITS	5
A. Outfall 001 - Effluent Limits for Low Chloride Wastewater	
B. Outfall 003 - Effluent Limits for Non-Contact Cooling Water	
C. Outfall 004 - Effluent Limits for High Chloride and High Sodium, High Silicate (HSHS) Wastewaters	
D. Stormwater	
E. Best Management Practices (Dust Control)	
S2. MONITORING REQUIREMENTS.....	7
A. Outfall 001 Low Chloride Process Wastewater Monitoring	
B. Outfall 003 - Non Contact Cooling Water Monitoring	
C. Outfall 004 - High Chloride & High Sodium, High Silicate (HSHS) Wastewaters	
D. Ground Water Monitoring	
E. Soil Monitoring	
F. Crop Monitoring	
G. Sampling and Analytical Procedures	
H. Flow Measurement, Field Measurement and Continuous Monitoring Devices	
I. Laboratory Accreditation	
S3. REPORTING AND RECORDKEEPING REQUIREMENTS.....	13
A. Reporting	
B. Records Retention	
C. Recording of Results	
D. Additional Monitoring by the Permittee	
E. Reporting Permit Violations	
F. Other Reporting	
G. Maintaining a Copy of This Permit	
S4. OPERATION AND MAINTENANCE.....	16
A. Operations and Maintenance Manual	
B. Bypass Procedures	
C. Irrigation Land Application Best Management Practices	
S5: Dust Management Plan.....	20
S6. FACILITY LOADING FOR LAND APPLICATION SYSTEM (OUTFALL 003).....	20
A. Design Criteria	
S7. PROHIBITED DISCHARGES (OUTFALL 001).....	20
A. General Prohibitions	
B. Specific Prohibitions	
C. Prohibited Unless Approved	

S8. DILUTION PROHIBITED (OUTFALL 001).....21

S9. SLUG DISCHARGE CONTROL PLAN (OUTFALL 001).....21

S10. SOLID WASTES.....22

- A. Solid Waste Handling
- B. Leachate
- C. Solid Waste Control Plan

S11. APPLICATION FOR PERMIT RENEWAL23

S12. NON-ROUTINE AND UNANTICIPATED DISCHARGES.....23

S13. SPILL PLAN24

S14. UPDATED GROUND WATER QUALITY EVALUATION (HYDROGEOLOGIC STUDY).....24

15. IRRIGATION AND CROP MANAGEMENT PLAN.....25

- A. Annual Summary of Farm Operations for Previous Year
- B. Cropping and irrigation Schedule for Upcoming Year

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS27

G2. RIGHT OF ENTRY.....27

G3. PERMIT ACTIONS28

G4. REPORTING A CAUSE FOR MODIFICATION.....28

G5. PLAN REVIEW REQUIRED.....28

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES.....28

G7. TRANSFER OF THIS PERMIT29

G8. REDUCED PRODUCTION FOR COMPLIANCE.....29

G9. REMOVED SUBSTANCES.....29

G10. PAYMENT OF FEES.....29

G11. PENALTIES FOR VIOLATING PERMIT CONDITIONS29

G12. DUTY TO PROVIDE INFORMATION.....30

G13. DUTY TO COMPLY.....30

Appendix A.....31

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.	Discharge Monitoring Report	Monthly	August 15, 2010
S3.E	Reporting Permit Violations	As necessary	-
S3.F	Other Reporting	As necessary	-
S4.A.	Operations and Maintenance Manual	1/permit cycle	April 1, 2011
S4.B	Reporting Bypasses	As necessary	-
S4.D.	Dust Management Plan	Annually	February 15, 2011
S9.	Slug Discharge Control Plan	1/permit cycle	April 1, 2011
S10.C.	Solid Waste Control Plan	1/permit cycle	April 1, 2011
S10.C.	Solid Waste Control Plan Update	1/permit cycle	June 30, 2014
S11.	Application for Permit Renewal	1/permit cycle	June 30, 2014
S12.	Non-Routine Discharge Report	As necessary	-
S13.	Spill Plan	1/permit cycle	April 1, 2011
S14.	Ground Water Quality Evaluation Scope of Work	1/permit cycle	October 1, 2010
S14.	Ground Water Quality Evaluation Study Report	1/permit cycle	January 1, 2012
S15.	Irrigation and Crop Management Plan	1/year	April 15, 2011
G1.C.	Notice of Change in Authorization	As necessary	-
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	-
G5.	Engineering Report for Construction or Modification Activities	As necessary	-
G7	Notice of Permit Transfer	As necessary	-

SPECIAL CONDITIONS

S1. DISCHARGE LIMITS

A. Outfall 001 - Effluent Limits for Low Chloride Wastewater

All discharges and activities authorized by this permit must comply with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit violates the terms and conditions of this permit.

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to discharge wastewater to City of Moses Lake POTW, Sand Dunes Treatment Plant subject to the following limits:

Parameter	EFFLUENT LIMITS	
	Average Monthly ^a	Maximum Daily ^b
Flow, gpd	210,000	300,000
pH, standard units (su)	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 11.0.	
Oil and Grease, mg/L	-	100
TDS, lbs/day	3,240	4,560
Chloride, lbs/day	63	90
Sodium, lbs/day	558	796
Fluoride, lbs/day	28	46
BOD ₅ , mg/L	-	300
TSS, mg/L	350	-
^a Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.		
^b Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. This does not apply to pH.		

B. Outfall 003 - Effluent Limits for Non-Contact Cooling Water

Beginning on the effective date and lasting through the expiration date, the Permittee is authorized to apply non-contact cooling water to the designated irrigation lands via spray irrigation not to exceed the agronomic rates for nitrogen and water, and at rates for any other wastewater constituents to protect background water quality.

The discharge from the fire water ponds to the 60 million gallons storage pond must not exceed a daily maximum total dissolved solids (TDS) value of 2,500 mg/L.

The Permittee is authorized to apply process wastewater for final treatment on the following designated irrigation lands:

125 acres within the NW¼ of Section 17, Township 19 N., Range 29 E.WM, Grant County.

Total nitrogen and water applied to the irrigation lands must not exceed the crop requirements as determined by the Permittee's Irrigation and Crop Management Plan, Condition S14. and must not exceed the Facility Loading specified in Condition S7.

The Permittee must operate the sprayfields to protect the existing and future beneficial uses of the ground water and not cause a violation of the ground water standards (chapter 173-200 WAC).

C. Outfall 004 - Effluent Limits for High Chloride and High Sodium, High Silicate (HSHS) Wastewaters

Beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge high chloride and high sodium, high silicate (HSHS) wastewaters to evaporation ponds, including the 21 million gallon off-site evaporation pond located at 13583 E. Wheeler Road, within the SW¼ of Section 20, Township 19 N., Range 29 E.WM. The Permittee must not discharge either high chloride or high sodium, high silicate wastewaters (HSHS) to either outfalls 001 or 003, or in any manner to surface water of the State or to the City of Moses Lake's wastewater treatment plant; except as provided for high chloride wastewater used for dust control on the site premises according to requirements in Special Condition S1.E.

D. Stormwater

Beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge site stormwater to lined evaporation ponds for evaporation and designated infiltration areas. The Permittee must not discharge site stormwater to outfalls 001 or 003, or in any manner to surface water of the State or to the City of Moses Lake's wastewater treatment plant.

E. Best Management Practices (Dust Control)

The Permittee may use high chloride process wastewater (Outfall 004) for dust control on the site premises. The Permittee must comply with the following Best Management Practices to prevent pollution to waters of the State when using high chloride process wastewater for dust control:

1. The Permittee may apply the high chloride wastewater on active construction areas and unpaved roadways only.
2. The concentration of calcium chloride must exceed 30% by weight.
3. The Permittee must follow the notification/reporting requirements in Special Condition S5.

S2. MONITORING REQUIREMENTS**A. Outfall 001 Low Chloride Process Wastewater Monitoring**

The Permittee must monitor the wastewater at the Outfall 001 metering manhole sump prior to discharge to the City of Moses Lake POTW.

See Appendix A for analytical methods and quantitation levels.

The Permittee must monitor the wastewater according to the following schedule:

Parameter	Units	Sampling Frequency	Sample Type
Flow	gpd	Continuous	Meter
Temperature	°F	"	"
Conductivity	µmhos/cm	"	"
pH	su	"	"
Oil and Grease	mg/L	1/week	Grab
NO ₃ (as N)	"	1/week	24-hour composite
TSS	"	5/week	"
TDS	mg/L; lbs/day	"	"
Sodium	"	"	"
Chloride	"	"	"
Fluoride	"	"	"
Sulfate	"	"	"
BOD ₅	mg/L	1/week	"
Magnesium	"	1/month	"
Potassium	"	"	"

Parameter	Units	Sampling Frequency	Sample Type
Manganese	"	"	"
Calcium	"	"	"
Alkalinity ^a	"	1/month	"
NH ₃ (as N)	"	1/month	"
Total-P (as P)	"	1/month	"
Metals ^b	µg/L	See Footnote ^c	"
Appendix A Pollutants (not including Conventionals and Non-Conventionals) ^d	"	See Footnote ^e	24-hour composite/grab
^a Measure bicarbonate, carbonate, and hydroxide alkalinities.			
^b Arsenic, Cadmium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc			
^c Measure metals 2/year (February and August).			
^d As listed in Appendix A.			
^e Once in August, 2010 and Once in August, 2014.			

B. Outfall 003 – Non Contact Cooling Water Monitoring

The sampling point for the irrigated wastewater is at the irrigation pump station(s) located at the 60 million gallon storage pond. The sampling point for the fire pond discharge is at the fire pond weir structure.

See Appendix A for analytical methods and quantitation levels.

The Permittee must monitor the non-contact cooling water used for irrigation according to the following schedule:

Parameter	Units	Sample Point	Sampling Frequency	Sample Type
TDS	mg/L	Fire Pond Outlet	2/month	Grab
Flow	gpd	Irrigated Effluent	Continuous	Meter
pH	su	"	2/month	Grab
TDS	mg/L	"	"	"
Sodium	"	"	"	"
Chloride	"	"	"	"
Fluoride	"	"	"	"
Magnesium	"	"	"	"
Potassium	"	"	"	"

Parameter	Units	Sample Point	Sampling Frequency	Sample Type
Manganese	"	"	"	"
Calcium	"	"	"	"
Sulfate	"	"	"	"
Alkalinity ^a	"	"	"	"
NO ₃ (as N)	"	"	"	"
NH ₃ (as N)	"	"	"	"
Total-P (as P)	"	"	"	"

^a Measure bicarbonate, carbonate, and hydroxide alkalinities.

C. Outfall 004 – High Chloride & High Sodium, High Silicate (HSHS) Wastewaters

The sampling points for the high chloride and high sodium high silicate (HSHS) wastewaters are at the respective treatment system clarifier prior to discharge to the evaporation pond system and at the point of withdrawal from the evaporation pond system.

The Permittee must monitor the high chloride and high sodium, high silicate (HSHS) wastewaters according to the following schedule:

Parameter	Units	Sample Point	Sampling Frequency	Sample Type
High Chloride (HC) Wastewater Flow	gpd	HC Equalization Tank Discharge	Continuous	Meter
HSHS Wastewater Flow	gpd	HSHS Equalization Tank Discharge	Continuous	Meter
Water Withdrawn for offsite disposal/dust control	gallons	High Chloride Evaporation Ponds	Daily	Estimate
Water Withdrawn for offsite disposal	gallons	HSHS Evaporation Ponds	Daily	Estimate

D. Ground Water Monitoring

The Permittee must monitor the ground water at monitoring wells MW-2, MW-3, MW-4, MW-6, MW-11, MW-12, MW-13 and MW-14 according to the following schedule:

Parameter	Units	Monitoring Well	Sampling Frequency	Sample Type
Static Water Elevation	Feet (nearest 0.01 ft relative to mean sea level)	MW-2, MW-3, MW-4, MW-6, MW-11, MW-12, MW-13, MW-14	Once/month	Field Measurement
Conductivity	µmhos/cm	"	"	"
Temperature	°C	"	"	"
pH	su	"	"	"
TDS	mg/L	MW-11, MW-12, MW-13, MW-14	"	Grab
Total Organic Carbon	mg/l	"	"	"
Iron (Total)	mg/l	"	"	"
NO ₃ (as N)	"	"	"	"
Sodium	"	"	"	"
Calcium	"	"	"	"
Magnesium	"	"	"	"
Potassium	"	"	"	"
Manganese	"	"	"	"
Chloride	"	"	"	"
Sulfate	"	"	"	"
Alkalinity ^a	"	"	"	"

^a Measure bicarbonate, carbonate, and hydroxide alkalinity.

E. Soil Monitoring

The Permittee must monitor soil on the irrigation lands as follows:

1. Monitor twice per year.
2. Locate sampling sites so they represent each irrigation site or as identified in the crop management plan.
3. If possible, locate sampling sites in the same vicinity each year.
4. Test soil at each sampling site on one foot soil increments.
5. Submit results annually with the Irrigation and Crop Management Plan.
6. Composite a minimum of four (4) core samples at the six depth increments as defined in the table below (or until auger refusal).

7. Collect Samples at a time that best represents soil conditions at the beginning and the end of the crop growing season.

The Permittee must monitor the soils in the center pivot sprayfield according to the following schedule:

Parameter	Units	Sample Point	Depth Increments ^a
Exchangeable sodium percentage	%	Each field	1-6
Cation exchange capacity	meq/100g	"	"
Organic matter	%	"	"
Moisture content	%	"	"
TKN (as N)	mg/Kg	"	"
NO ₃ (as N)	mg/Kg	"	"
NH ₃ (as N)	mg/Kg	"	"
Total-P (as P)	mg/Kg	"	"
Conductivity	mmhos/cm	"	"
Sodium	meq/100g	"	"
Calcium	meq/100g	"	"
Magnesium	meq/100g	"	"
Potassium	mg/Kg	"	"
Sulfate (as S)	mg/Kg	"	"
pH	Standard Units	"	"
^a Depth increment (ft.) vs. Depth (inches) for composite samples:			
Increment 1		0 -12 inches	
Increment 2		12-24 inches	
Increment 3		24-36 inches	
Increment 4		36-48 inches	
Increment 5		48-60 inches	
Increment 6		60-72 inches	

F. Crop Monitoring

The Permittee must:

1. Monitor the crops for the parameters listed below on each field once per harvest.
2. Comprise composite samples of at least ten (10) random samples collected from the center-pivot field.

Parameter	Units
Crop production	dry tons/ac
Moisture content	%
Crude protein	%
Total Kjeldahl Nitrogen	%
NO ₃ (as N)	mg/Kg (dry wt)
Total-P (as P)	mg/Kg (dry wt)
Ash Weight	mg/Kg (dry wt)
Sodium	mg/Kg (dry wt)
Magnesium	mg/Kg (dry wt)
Potassium	mg/Kg (dry wt)
Calcium	mg/Kg (dry wt)
Sulfate	mg/Kg (dry wt)

G. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters. The Permittee must conduct representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions that may affect effluent quality.

Ground water sampling should conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 2005).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit must conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by Ecology.

The Permittee must conduct and report all soil analysis in accordance with the Western States Laboratory Plant, Soil and Water Analysis Manual, *Soil, Plant And Water Reference Methods for The Western Region, 2nd Edition, 2003* available at http://cropandsoil.oregonstate.edu/wera103/Soil_Methods.htm.

H. Flow Measurement, Field Measurement and Continuous Monitoring Devices

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
4. Calibrate these devices at the frequency recommended by the manufacturer.
5. Calibrate flow monitoring devices at a minimum frequency of at least one calibration per year.
6. Maintain calibration records for at least three years.

I. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC, *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Crops and soils data are process control parameters which do not require preparation by an accredited laboratory. However, the Permittee must obtain this data from a reputable agricultural test lab that is an active participant in a nationally recognized agricultural laboratory proficiency testing program.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee must monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must:

1. Submit monitoring results each month.
2. Summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology.

3. Submit DMR forms monthly whether or not the facility was discharging. If the facility did not discharge during a given monitoring period, submit the form as required with the words "NO DISCHARGE" entered in place of the monitoring results.
4. Ensure that DMR forms are postmarked or received by Ecology no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit.
5. Submit priority pollutant analysis data no later than forty-five (45) days following the monitoring.
6. Send report(s) to Ecology at:

Department of Ecology
Water Quality Permit Coordinator
4601 North Monroe Street
Spokane, WA 99205-1295

All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must include information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

B. Records Retention

The Permittee must retain records of all monitoring information for a minimum of three (3) years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The Permittee must extend this period of retention during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

C. Recording of Results

For each measurement or sample taken, the Permittee must record the following information:

1. The date, exact place and time of sampling.
2. The individual who performed the sampling or measurement.
3. The dates the analyses were performed.
4. The individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Condition S2 of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Reporting Permit Violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

- a. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
- b. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within thirty (30) days of sampling.

1. Immediate Reporting

The Permittee must immediately report the following occurrences of noncompliance by telephone, to Ecology at (509) 329-3400, for any of the following circumstances:

- a. Any noncompliance that may endanger health or the environment.
- b. Any unanticipated bypass that exceeds any effluent limit in the permit (See Part S4.B., "Bypass Procedures").
- c. Any upset that exceeds any effluent limit in the permit. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- d. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1.A of this permit.
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit.

2. Report Within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.

- c. The estimated time noncompliance is expected to continue if it has not been corrected.
- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

3. Waiver of Written Reports

Ecology may waive the written report required in subpart 2, above, on a case-by-case basis upon request if a timely oral report has been received.

4. Report Submittal

The Permittee must submit reports to the address listed in S3.A.

F. Other Reporting

The Permittee must report all instances of noncompliance, not required to be reported immediately, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in paragraph E.3, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

G. Maintaining a Copy of This Permit

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors.

S4. OPERATION AND MAINTENANCE

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Operations and Maintenance Manual

The Permittee must:

1. Update the Operations and Maintenance (O&M) Manual in accordance with 173-240-150 WAC and submit it to Ecology for approval within nine months after permit issuance.

2. Review the O&M Manual at least annually and confirm this review by letter to Ecology.
3. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual whenever it incorporates them into the manual.
4. Keep the approved O&M Manual at the permitted facility.
5. Follow the instructions and procedures of this manual.

In addition to the requirements of WAC 173-240-150(1) and (2), the O&M manual must include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
2. Irrigation system operational controls and procedures.
3. Wastewater system maintenance procedures that contribute to the generation of process wastewater.
4. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
5. Treatment plant process control monitoring schedule.
6. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
7. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
8. Protocols and procedures for ground water monitoring network, and soil sampling and testing.
9. Protocols and procedures for leak detection at the 60 million gallon storage pond.

B. Bypass Procedures

This permit prohibits a bypass which is the intentional diversion of waste streams from any portion of a treatment facility. Ecology may take enforcement action against a Permittee for a bypass unless one of the following circumstances (1, 2, or 3) applies.

1. Bypass is for essential maintenance without the potential to cause violation of permit limits or conditions.

This permit authorizes a bypass if it allows for essential maintenance and does not have the potential to cause violations of limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass is unavoidable, unanticipated, and results in noncompliance with the conditions of this permit.

This permit authorizes such a bypass only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
 - b. No feasible alternatives to the bypass exist, such as:
 - The use of auxiliary treatment facilities.
 - Retention of untreated wastes.
 - Stopping production.
 - Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.
 - Transport of untreated wastes to another treatment facility.
 - c. The Permittee has properly notified Ecology of the bypass as required in Condition S3.E of this permit.
3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
- a. The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:
 - A description of the bypass and its cause.
 - An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
 - A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
 - The minimum and maximum duration of bypass under each alternative.
 - A recommendation as to the preferred alternative for conducting the bypass.
 - The projected date of bypass initiation.
 - A statement of compliance with SEPA.
 - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
 - Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
 - b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to

the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.

- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
 - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
 - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. Ecology will give the public an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Ecology will approve a request to bypass by issuing an administrative order under RCW 90.48.120.

C. Irrigation Land Application Best Management Practices

The Permittee must:

1. Not allow spray irrigation practices to result in runoff of wastewater to any surface waters of the state or to any land not owned by or under its control.
2. Use recognized good practices, and all available and reasonable procedures to control odors from the land application system.
3. Implement measures to reduce odors to a reasonable minimum when notified by Ecology.
4. Not apply wastewater to the irrigation lands in quantities that:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
 - b. Would cause long-term anaerobic conditions in the soil.
 - c. Would cause ponding of wastewater and produce objectionable odors or support insects or vectors.
 - d. Would cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.
5. Maintain all irrigation agreements for lands not owned for the duration of the permit cycle. Any reduction in irrigation lands by termination of any irrigation agreements may result in permit modification or revocation.

6. Immediately inform Ecology in writing of any proposed changes to existing irrigation agreements.

S5. DUST MANAGEMENT PLAN

By February 15th of each year, the Permittee must submit a dust management plan that includes:

- A. The expected areas (unpaved roadways and active construction areas) where the Permittee plans to use high chloride wastewater for dust control for the upcoming year.
- B. An estimate for the application rates and timing for the high chloride wastewater.
- C. An examination of alternatives for using the high chloride wastewater for dust control. These alternatives may include, but are not limited to, establishing vegetative cover; paving; alternative traffic routes, alternative dust suppressants, etc.
- D. Provides a summary of the previous year's dust suppression efforts using high chloride wastewater. This summary shall identify the areas where the Permittee used high chloride wastewater; and report the timing and application rates (volume) of high chloride wastewater applied.

S6. FACILITY LOADING FOR LAND APPLICATION SYSTEM (OUTFALL 003)

A. Design Criteria

The flows for the land application of non-contact cooling water (Outfall 003) must not exceed the following design criteria:

Design Flow Rate	342,000 gpd (annual average)
Non-Contact Cooling Water Volume Applied	106.9 MG (31.6 inches)

S7. PROHIBITED DISCHARGES (OUTFALL 001)

A. General Prohibitions

The Permittee must not introduce into the POTW pollutant(s) which cause Pass Through or Interference.

B. Specific Prohibitions

In addition, the following must not be introduced into the POTW:

1. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 60°C (140°F) using the test methods specified in 40 CFR 261.21.
2. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference.

3. Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
4. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW collection system exceeds 40°C (104°F) unless the approval authority, upon request of the POTW, approves alternative temperature limits.
5. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
6. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.
7. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
8. Pollutants which will cause corrosive structural damage to the POTW.

C. Prohibited Unless Approved

1. Any of the following discharges are prohibited unless approved by Ecology under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or a need to augment sewage flows due to septic conditions):
 - a. Noncontact cooling water in significant volumes.
 - b. Storm water and other direct inflow sources.
 - c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.
2. Unless specifically authorized in this permit, the discharge of dangerous wastes as defined in Chapter 173-303 WAC, is prohibited.

S8. DILUTION PROHIBITED (OUTFALL 001)

The Permittee must not dilute the wastewater discharge with stormwater or increase the use of potable water, process water, noncontact cooling water, or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limits contained in this permit.

S9. SLUG DISCHARGE CONTROL PLAN (OUTFALL 001)

If required to also complete a spill plan as described in S12., the Permittee may combine it with the slug discharge control plan described in this section.

Within nine months after permit issuance, the Permittee must prepare and submit to Ecology a plan to minimize the potential of slug discharges from the facility covered by this permit. The plan and any subsequent revisions become effective 30 days following

submission. The plan must include the following information and procedures relating to the prevention of unauthorized slug discharges:

1. A description of a reporting system the Permittee will use to immediately notify facility management, the POTW operator, and appropriate state, federal, and local authorities of any slug discharges, and provisions to provide a written follow-up report within five days;
2. A description of operator training, equipment, and facilities (including overall facility plan) for preventing, containing, or treating slug discharges;
3. A list of all raw materials, products, chemicals, and hazardous materials used, processed, or stored at the facility; the normal quantity maintained on the premises for each listed material; and a map showing where they are located.
4. A description of discharge practices for batch and continuous processes under normal and non-routine circumstances;
5. A brief description of any unauthorized discharges which occurred during the 36-month period preceding the effective date of this permit and subsequent measures taken by Permittee to prevent or to reduce the possibility of further unauthorized discharges; and
6. An implementation schedule including additional operator training and procurement and installation of equipment or facilities required to properly implement the plan.

The Permittee must:

1. Review its slug discharge plan and update it as needed but no less than every two years.
2. Submit all revisions or updates of this plan to Ecology for review and approval.
3. Maintain the current approved plan on the plant site and make it readily available to facility personnel.
4. Submit an update of the slug discharge control plan, or a certification that it is current by April 1, 2011.

S10. SOLID WASTES

A. Solid Waste Handling

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

The Permittee must:

1. Submit a solid waste control plan to Ecology within nine months after permit issuance.
2. Submit to Ecology any proposed revision or modification of the solid waste control plan for review and approval at least 30 days prior to implementation.
3. Comply with the plan and any modifications.
4. Submit an update of the solid waste control plan by April 1, 2011.

The solid waste control plan must:

1. Follow Ecology's guidance for preparing a solid waste control plan (www.ecy.wa.gov/biblio/0710024.html) and address all solid wastes generated by the permittee.
2. Include at a minimum a description, source, generation rate, and disposal methods of these solid wastes.
3. Not conflict with local or state solid waste regulations.

S11. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by June 30, 2014.

S12. NON-ROUTINE AND UNANTICIPATED DISCHARGES

Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must contact Ecology and **at a minimum** provide the following information:

1. The proposed discharge location.
2. The nature of the activity that will generate the discharge.
3. Any alternatives to the discharge, such as reuse, storage or recycling of the water.
4. The total volume of water it expects to discharge.
5. The results of the chemical analysis of the water. The Permittee must analyze the water for all constituents limited for the discharge. The analysis must also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by Ecology. All discharges must comply with the effluent limits as established in Condition S1. of this permit, water quality standards, and any other limits imposed by Ecology.
6. The date of the proposed discharge.
7. The expected rate of discharge in gallons per minute. The Permittee must limit the discharge rate so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.

The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

S13. SPILL PLAN

The Permittee must:

1. Submit to Ecology a spill control plan for the prevention, containment, and control of spills or unplanned releases of pollutants within nine months after permit issuance.
2. Review the plan at least annually and update the Spill Plan as needed.
3. Send changes to the plan to Ecology.
4. Follow the plan and any supplements throughout the term of the permit.

The spill control plan must include the following:

1. A list of all oil and petroleum products and other materials used and/or stored on site, which when spilled, or otherwise released into the environment, designate as Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070. Include other materials used and/or stored on site which may become pollutants or cause pollution upon reaching state's waters.
2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
3. A description of the reporting system the Permittee will use to alert responsible managers and legal authorities in the event of a spill.
4. A description of operator training to implement the plan.

S14. UPDATED GROUND WATER QUALITY EVALUATION (HYDROGEOLOGIC STUDY)

The Permittee must evaluate the impacts of its activities on ground water quality by completing the elements below to include: a scope of work for an updated ground water quality evaluation study, and an updated ground water quality evaluation study.

1. Within 3 months after permit issuance, the Permittee must submit a scope of work to Ecology for an updated ground water quality evaluation study at the wastewater application site, in accordance with WAC 173-200-080. The scope of work must also conform to Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems, Ecology 1993.
2. Upon approval of the scope of work by Ecology, the Permittee must update their hydrogeologic study to determine site specific hydrogeologic conditions using at least 12 months of data collected from the existing monitoring well network. The Permittee must submit an updated hydrogeologic study within 18 months after permit issuance.

The study must include:

- an estimate of the background ground water quality, as determined by the site specific hydrogeologic conditions;
- recommendations for any additional new well(s) siting;
- a map identifying all surface and buried drains in the vicinity of the land application site; and
- recommendations for additional sample locations for any surface and buried drains identified above;
- an evaluation of possible ground mounding effects and its effects on the ground water monitoring network; and
- an assessment whether the existing monitoring wells can serve as a ground water monitoring network for the evaporation pond system.

15. IRRIGATION AND CROP MANAGEMENT PLAN

The Permittee must submit an Irrigation and Crop Management Plan annually by April 15th of each year for Ecology review. The plan must be prepared by a soil scientist and must generally conform to the *Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems*, Ecology 1993.

The plan must include the following elements:

A. Annual Summary of Farm Operations for Previous Year

This summary must include:

1. For each crop grown, the total acreage and quantity harvested.
2. Calculated balances for nutrients, salts, TDS, or other design limiting parameters. The calculations must include crop consumptive use, process wastewater loadings of nutrients, salts, TDS or other design limiting parameters, contributions from commercial fertilizers applied, and supplemental water.
3. A **water balance** including the following calculations:
 - a. Irrigation system efficiency and application uniformity.
 - b. The quantity of supplemental irrigation water and process wastewater applied.
 - c. Crop consumptive use.
 - d. Water stored in the soil profile outside the normal growing season.
 - e. Salt leaching requirements.
 - f. The leaching fraction for each field.
4. A comparison of the actual total net nitrogen, water, fixed dissolved solids, (other parameters) loads, and the leaching fractions for each field to the estimated values presented in the previous year's Irrigation and Crop Plan.

5. A summary and evaluation of the **soil testing results**.
6. A summary and evaluation of the **crop testing results**.

B. Cropping and irrigation Schedule for Upcoming Year

This schedule must include:

1. Crop Management information including:
 - a. The proposed acreage for each crop.
 - b. Cultivation and harvesting requirements.
 - c. Expected crop yields.
 - d. Methods for establishing a crop.
 - e. Proposed schedule for herbicide, pesticide, and fertilizer application.
2. Irrigation Management information including:
 - a. The frequency and timing of wastewater and supplemental irrigation water application (including harvest and non-harvest periods).
 - b. Recommended rest cycles for wastewater application where organic or hydraulic loading is of concern.
 - c. An estimation of the leaching requirement for each field and the plan to meet the requirement.
3. The estimated annual total net nitrogen and water load capacity, and the fixed dissolved solids and BOD load to each field based on the estimated process wastewater discharge and planned crop rotation.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to Ecology must be signed as follows:

- A. All permit applications must be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 1. The authorization is made in writing by the person described above and is submitted to Ecology at the time of authorization, and
 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2. above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

"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 gathered and evaluated 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."

G2. RIGHT OF ENTRY

Representatives of Ecology must have the right to enter at all reasonable times in or upon any property, public or private for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times include normal business hours; hours during which production, treatment, or discharge occurs; or times when Ecology suspects a violation requiring immediate inspection. Representatives of Ecology must be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

G3. PERMIT ACTIONS

This permit is subject to modification, suspension, or termination, in whole or in part by Ecology for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

Ecology may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application at least 60 days before it wants to discharge more of any pollutant, a new pollutant, or more flow than allowed under this permit. The Permittee should use the State Waste Discharge Permit application, and submit required plans at the same time. Required plans include an Engineering Report, Plans and Specifications, and an Operations and Maintenance manual, (see Chapter 173-240 WAC). Ecology may waive these plan requirements for small changes, so contact Ecology if they do not appear necessary. The Permittee must obtain the written concurrence of the receiving POTW on the application before submitting it to Ecology. The Permittee must continue to comply with the existing permit until it is modified or reissued. Submitting a notice of dangerous waste discharge (to comply with Pretreatment or Dangerous Waste rules) triggers this requirement as well.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities must be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit must be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. TRANSFER OF THIS PERMIT

This permit is automatically transferred to a new owner or operator if:

- A. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to Ecology;
- B. A copy of the permit is provided to the new owner and;
- C. Ecology does not notify the Permittee of the need to modify the permit.

Unless this permit is automatically transferred according to section A. above, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by Ecology.

G8. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee must control production or discharge to the extent necessary to maintain compliance with the terms and conditions of this permit upon reduction of efficiency, loss, or failure of its treatment facility until the treatment capacity is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power for the treatment facility is reduced, lost, or fails.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the effluent stream for discharge.

G10. PAYMENT OF FEES

The Permittee must submit payment of fees associated with this permit as assessed by Ecology. Ecology may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G11. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit is guilty of a crime, and upon conviction thereof will be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit incurs, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is a separate and distinct violation.

G12. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

G13. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance related to the discharge of wastewater to the POTWs constitutes a violation of the Clean Water Act and is grounds for enforcement action. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

APPENDIX A

EFFLUENT CHARACTERIZATION FOR POLLUTANTS THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)

The following table specifies analytical methods and levels to be used for effluent characterization in NPDES and State waste discharge permits. This appendix specifies effluent characterization requirements of the Department of Ecology unless other methods are specified in the body of this permit.

This permit specifies the compounds and groups of compounds to be analyzed. Ecology may require additional pollutants to be analyzed within a group. The objective of this appendix is to reduce the number of analytical "non-detects" in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L unless specified	Quantitation Level (QL) ² µg/L unless specified
CONVENTIONALS			
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3- GH		0.3 mg/L
Flow	Calibrated device		
Dissolved oxygen	4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use micro- recording devices known as thermistors		0.2° C
pH	SM4500-H ⁺ B	N/A	N/A
NONCONVENTIONALS			
Total Alkalinity	SM2320-B		5 mg/L as CaCo ₃
Chlorine, Total Residual	4500 Cl G		50.0
Color	SM2120 B/C/E		10 color unit
Fecal Coliform	SM 9221D/E, 9222	N/A	N/A
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate-Nitrite (as N)	4500-NO ₃ - E/F/H		100
Nitrogen, Total Kjeldahl (as N)	4500-NH ₃ -C/E/FG		300
Ortho-Phosphate (PO ₄ as P)	4500- PE/PF	3	10
Phosphorus, Total (as P)	4500-PE/PF	3	10

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Oil and Grease (HEM)	1664A	1,400	5,000
Salinity	SM2520-B		3 PSS
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO ₄)	SM4110-B		200
Sulfide (as mg/L S)	4500-S ² F/D/E/G		200
Sulfite (as mg/L SO ₃)	SM4500-SO3B		2000
Total dissolved solids	SM2540 C		20 mg/L
Total Hardness	2340B		200 as CaCO ₃
Aluminum, Total (7429-90-5)	200.8	2.0	10
Barium Total (7440-39-3)	200.8	0.5	2.0
Boron Total (7440-42-8)	200.8	2.0	10.0
Cobalt, Total (7440-48-4)	200.8	0.05	0.25
Iron, Total (7439-89-6)	200.7	12.5	50
Magnesium, Total (7439-95-4)	200.7	10	50
Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
Manganese, Total (7439-96-5)	200.8	0.1	0.5
Tin, Total (7440-31-5)	200.8	0.3	1.5
METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total (7440-36-0)	200.8	0.3	1.0
Arsenic, Total (7440-38-2)	200.8	0.1	0.5
Beryllium, Total (7440-41-7)	200.8	0.1	0.5
Cadmium, Total (7440-43-9)	200.8	0.05	0.25
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
Chromium, Total (7440-47-3)	200.8	0.2	1.0
Copper, Total (7440-50-8)	200.8	0.4	2.0
Lead, Total (7439-92-1)	200.8	0.1	0.5
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
Nickel, Total (7440-02-0)	200.8	0.1	0.5
Selenium, Total (7782-49-2)	200.8	1.0	1.0
Silver, Total (7440-22-4)	200.8	0.04	0.2
Thallium, Total (7440-28-0)	200.8	0.09	0.36
Zinc, Total (7440-66-6)	200.8	0.5	2.5
Cyanide, Total (57-12-5)	335.4	2	10
Cyanide, Weak Acid Dissociable	SM4500-CN I	2	10
Phenols, Total	EPA 420.1		50
DIOXIN			
2,3,7,8-Tetra-Chlorodibenzo-P- Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L
VOLATILE COMPOUNDS			
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toulene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0
ACID COMPOUNDS			
2-Chlorophenol (95-57-8)	625	1.0	2.0
2,4-Dichlorophenol (120-83-2)	625	0.5	1.0
2,4-Dimethylphenol (105-67-9)	625	0.5	1.0
4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6-dinitrophenol)	625/1625B	1.0	2.0
2,4 dinitrophenol (51-28-5)	625	1.0	2.0
2-Nitrophenol (88-75-5)	625	0.5	1.0
4-nitrophenol (100-02-7)	625	0.5	1.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L unless specified	Quantitation Level (QL) ² µg/L unless specified
Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0
Pentachlorophenol (87-86-5)	625	0.5	1.0
Phenol (108-95-2)	625	2.0	4.0
2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene (83-32-9)	625	0.2	0.4
Acenaphthylene (208-96-8)	625	0.3	0.6
Anthracene (120-12-7)	625	0.3	0.6
Benzidine (92-87-5)	625	12	24
Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
Benzo(a)anthracene (56-55-3)	625	0.3	0.6
Benzo(j)fluoranthene (205-82-3)	625	0.5	1.0
Benzo(r,s,t)pentaphene (189-55-9)	625	0.5	1.0
Benzo(a)pyrene (50-32-8)	610/625	0.5	1.0
3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.8	1.6
11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.8	1.6
Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0
Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2
Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether (39638-32-9)	625	0.3	0.6
Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5
4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
2-Chloronaphthalene (91-58-7)	625	0.3	0.6
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0
Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	1625B	5.0	20
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene (193- 39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
3-Methyl cholanthrene (56-49- 5)	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62- 75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86- 30-6)	625	0.5	1.0
Perylene (198-55-0)	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120- 82-1)	625	0.3	0.6
PESTICIDES/PCBs			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9)	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05 ¹⁰
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9)	608	0.25	0.5
PCB-1254 (11097-69-1)	608	0.25	0.5
PCB-1221 (11104-28-2)	608	0.25	0.5
PCB-1232 (11141-16-5)	608	0.25	0.5
PCB-1248 (12672-29-6)	608	0.25	0.5
PCB-1260 (11096-82-5)	608	0.13	0.5
PCB-1016 (12674-11-2)	608	0.13	0.5
Toxaphene (8001-35-2)	608	0.24	0.5

1. 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.
2. Quantitation Level (QL) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.

ADDENDUM TO FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-8121

REC Solar Grade Silicon, LLC

September, 2010

PURPOSE of this Fact Sheet

This fact sheet explains and documents the decisions Ecology made in amending the State Waste Discharge Permit for REC Solar Grade Silicon, LLC issued on June 28, 2010.

PUBLIC ROLE in the Permit

Ecology proposes to change the Total Suspended Solids (TSS) limit in the permit for low chloride process wastewater discharged to the City of Moses Lake, Sand Dunes Treatment Plant (Outfall 001); and authorize the use of an offsite evaporation pond for disposal of high chloride process wastewater (Outfall 004).

Ecology considers these amendments significant. As such, Ecology will make the draft amended permit and fact sheet available for public review and comment at least thirty (30) days before we amend the permit to the facility operator. Copies of the original and amended fact sheet and permit for REC Solar Grade Silicon, LLC (REC), State Waste Discharge Permit ST-8121 are available for public review and comment from October 5, 2010 until the close of business November 4, 2010. For more details on preparing and filing comments about these documents, please see **Public Involvement** section below.

After the public comment period closes, Ecology will summarize substantive comments and our responses to them. Ecology will include our summary and responses to comments to this Fact Sheet as **Response to Comments**, and publish it when we amend the State Waste Discharge Permit. The rest of the fact sheet will not be revised, but the full document will become part of the legal history contained in the facility's permit file.

SUMMARY

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.

The permit issued in June, 2010 included a daily maximum TSS limit for the low chloride process wastewater (Outfall 001) of 350 mg/L. Ecology based the TSS limit on the City of Moses Lake local sewer ordinance (350 mg/L as a daily maximum). In September, 2010, the City of Moses Lake approved a revised TSS limitation of 350 mg/L, as a monthly average.

REC also submitted a revised State Waste Discharge Permit application on July 23, 2010 for use of an offsite 21 million gallon lined pond for evaporation of high chloride process wastewater. The pond lies across Wheeler Road and was previously used to hold water from a sugar beet processing plant. Prior to use, REC plans to evaluate the liner system with an electronic leak detection test. REC will transfer the water using a 6,500 gallon tanker truck.

PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to amend a permit to REC Solar Grade Silicon, LLC. The modified permit prescribes operating conditions and wastewater discharge limits. This amended fact sheet describes the facility and Ecology's reasons for amending permit conditions.

Ecology will place a Public Notice on October 5, 2010 in the Columbia Basin Herald to inform the public and to invite comment on the proposed amendment of this State Waste Discharge Permit as amended.

The Notice –

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation.
- Offers to provide the documents in an alternate format to accommodate special needs.
- Asks people to tell us how well the proposed permit would protect the receiving water.
- Invites people to suggest fairer conditions, limits, and requirements for the permit.
- Invites comments on Ecology's determination of compliance with antidegradation rules.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed State Waste Discharge Permit.
- Explains the next step(s) in the permitting process.

The next page includes a copy of the Public Notice.

Ecology has published a document entitled **Frequently Asked Questions about Effective Public Commenting** which is available on our website at <http://www.ecy.wa.gov/biblio/0307023.html>.

You may obtain further information from Ecology by telephone at (509) 329-3400 or by writing to the permit writer at the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Eastern Regional Office
4601 North Monroe Street
Spokane, WA 99205-1295

*Fact Sheet Addendum for S Waste Discharge Permit ST-8121
REC Solar Grade Silicon, LLC.*

NOTICE: ANNOUNCEMENT OF AVAILABILITY OF DRAFT PERMIT MODIFICATION

PERMIT NO.: ST-8121

APPLICANT: REC Solar Grade Silicon LLC
3322 Road "N" N.E.
Moses Lake, WA 98837

REC Solar Grade Silicon, LLC (REC) has requested a modification of their State Waste Discharge Permit in accordance with the provisions of Chapter 90.48 Revised Code of Washington (RCW) and Chapter 173-216 Washington Administrative Code (WAC).

REC owns and operates a high purity polysilicon production plant in Moses Lake, Washington. The facility currently discharges process wastewater from the operations to the City of Moses Lake, Sand Dunes Treatment Plant (low chloride process wastewater); other process wastewaters to lined evaporation ponds (high chloride and high sodium, high silicate wastestreams); and non-contact cooling water to a 60 million gallon lined storage pond and 125 acre land application site.

REC has requested to modify their permit to allow the use of an off-site 21 million gallon lined evaporation pond for high chloride wastewater. The pond is located at the former Pacific Northwest Sugar sugar beet processing plant at 13583 E. Wheeler Road, within the SW¼ of Section 20, Township 19N., Range 29 E.WM.

REC has also requested to modify their total suspended solids (TSS) limit for the low chloride wastewater discharged to the City of Moses Lake, Sand Dunes Treatment Plant. The current permit contains a daily maximum concentration limit of 350 mg/L. REC SGS has requested the limit be changed to a monthly average concentration of 350 mg/L, consistent with the City of Moses Lake approved limit.

Following evaluation of the application and other available information, an amended draft permit has been developed as described above. A tentative determination has been made on these amendments that will prevent and control pollution. A final determination will not be made until all timely comments received in response to this notice have been evaluated.

PUBLIC COMMENT AND INFORMATION

The draft permit, fact sheet, and fact sheet addendum may be viewed at the Department of Ecology (Department) website at http://www.ecy.wa.gov/programs/wq/permits/eastern_permits.html. The application, fact sheet and addendum, proposed permit, and other related documents are also available at the Department's Eastern Regional Office for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m., weekdays. To obtain a copy or to arrange to view copies please call the Permit Coordinator at (509) 329-3455, e-mail stra461@ecy.wa.gov, or write to the address below.

Interested persons are invited to submit written comments regarding the proposed modification. All comments must be submitted within 30 days after publication of this notice to be considered for the final determination. The Department will only consider comments on the modified portions of this permit. Comments must be received by our office no later than November 4, 2010. Comments should be sent to:

Permit Coordinator
Department of Ecology
4601 N. Monroe Street
Spokane, WA 99205

Any interested party may request a public hearing on the proposed permit within 30 days of the publication date of this notice. The request for a hearing shall state the interest of the party and the reasons why a hearing is necessary. The request should be sent to the above address. The Department will hold a hearing if it determines that there is significant public interest. If a hearing is to be held, public notice will be published at least 30 days in advance of the hearing date. Any party responding to this notice with comments will be mailed a copy of a hearing public notice.

Please bring this public notice to the attention of persons who you know would be interested in this matter. Ecology is an equal opportunity agency. If you need this publication in an alternate format, please contact us at (509) 329-3400 or TTY (for the speech and hearing impaired) at 711 or 1-800-833-6388.

Rollins, Shirley (ECY)

From: Rollins, Shirley (ECY)
Sent: Monday, September 15, 2014 2:45 PM
To: 'Tana Geiss'
Subject: RE: REC Silicon--- permit # ST0008121
Attachments: ST0008121.pdf

Done!

Shirley
Department of Ecology
Water Quality Program
shirley.rollins@ecy.wa.gov
360.407.7330 - Phone
360.407.7151 - Fax

*"To the world you might be one person,
but to one person you might be the world."*

From: Tana Geiss [<mailto:Tana.Geiss@recsilicon.com>]
Sent: Monday, September 15, 2014 2:35 PM
To: Rollins, Shirley (ECY)
Cc: Paul Stenhouse
Subject: REC Silicon--- permit # ST0008121

Shirley,

Please send all invoices directly to the AP department at mlacct@recsilicon.com or if by regular mail please reference Accounts Payables on the invoices and not Kent Stephens.

Tana Geiss | Senior Accounts Payable | REC Silicon, Inc.
1616 W. Pioneer Way | Moses Lake, WA 98837 | USA
Phone 1-509-766-9128
www.recsilicon.com

Poston, Bev (ECY)

From: Hallinan, Patrick J. (ECY)
Sent: Tuesday, October 05, 2010 3:50 PM
To: Poston, Bev (ECY)
Subject: RE: REC Solar Grade Silicon - ST8121

Should be WA-0045241, under REC Silicon or Solar Grade Silicon.

From: Poston, Bev (ECY)
Sent: Tuesday, October 05, 2010 3:45 PM
To: Hallinan, Patrick J. (ECY)
Subject: RE: REC Solar Grade Silicon - ST8121

Pat,

What was the NPDES permit number. I can't find it under the permittee name.

Thanks - Bev

From: Hallinan, Patrick J. (ECY)
Sent: Tuesday, October 05, 2010 3:37 PM
To: Darrell, Ginny (ECY)
Cc: Joy, Shara-Li (ECY); Poston, Bev (ECY)
Subject: RE: REC Solar Grade Silicon - ST8121

Ginny,

REC switched from an NPDES permit (with State conditions), to a State permit.

Therefore, we didn't charge an application fee.

Pat

From: Darrell, Ginny (ECY)
Sent: Tuesday, October 05, 2010 8:33 AM
To: Hallinan, Patrick J. (ECY)
Cc: Joy, Shara-Li (ECY)
Subject: FW: REC Solar Grade Silicon - ST8121
Importance: High

Pat - Can you answer Bev's question?

Bev ~ I couldn't find another email, so I suspect your mind is intact and just fine!!

- Ginny

From: Poston, Bev (ECY)
Sent: Monday, October 04, 2010 12:16 PM
To: Darrell, Ginny (ECY)
Subject: REC Solar Grade Silicon - ST8121
Importance: High

Ginny,

We issued a permit for this facility on June 29. I can't remember if I asked you whether or not we charged an application fee and if so, what category did you charge these folks in.

If I did ask, I can't find what I did with your response. I swear my mind is going quickly.

Thanks for your help.

Bev

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WASTEWATER DISCHARGE PERMIT FEE PROGRAM

June 15, 1992

TERRY L. CUMMINGS
ADVANCED SILICON MATERIALS INC
3322 RD N NE
MOSES LAKE WA 98837

Permit Number: WA0045241

This letter is a pre-billing notice to inform you what your wastewater discharge permit fee will be for Fiscal Year (FY) 1993 (July 1, 1992 - June 30, 1993). The Ecology Fiscal Office is preparing the permit fee first semiannual billings and will mail invoices by mid-July, 1992.

Based on the current file information, your permit has been placed in the following fee category:

NOTICE - THIS IS NOT A BILL

Permit Fee Category: NONFERROUS METALS FORMING

Subcategory 1:

Subcategory 2:

FY93 Annual Permit Fee: \$11350.00

In the 1991 regular Legislative Session, House Bill 1228 was passed which requires interest to be charged at the rate of 1% per month, or fraction thereof, on debts owed to the state, starting on the date the debts become past due. Exemptions include: (1) any instance where the interest rate would conflict with a contract or other law; or (2) debts paid by other governmental units. Please be alerted that interest will begin to accrue for the FY93 billings and any amounts outstanding from prior years.

An example of how the interest accrual works is as follows: FY1993 billings will be mailed July 15. The due date will be August 31. On September 1, 1992, interest accrues at 1% of the unpaid fee amount. Another 1% accrues October 1, November 1, etc., until payment has been made. The interest law states: "1% per month or fraction thereof". This means "fraction of a month". In other words, if the permittee owes \$5,000 on August 31 and does not pay, on September 1, they will owe \$5,050, on October 1, they will owe \$5,100. Late payments will be applied first to any interest due, and then towards the permit fee. If for some reason a permittee does not feel the permit fee is calculated correctly, they must appeal in writing (certified mail) to the agency. Interest will not be charged during the appeal or disputed billing period.

If you have any questions, please contact the Operations (Permit Fee) Unit at either (206) 438-7039 or (206) 438-7097.

BAP:pb
Encl: (2)



DISCHARGER INFORMATION CHANGES

Identification Information

Date: _____

Facility Name: _____

Permit Number: _____ Permit Fee Year: _____

CHANGES (fill in only those changes):

Facility Name: _____

New Permit Number: _____

Billing Address: _____

City: _____ State _____ Zip Code _____

Contact Person: _____

Contact Person Phone Number: _____

Job Code: _____ Annual Permit Fee: _____

Prorated Permit Fee: _____

Fee Category: _____

(1) Subcategory: _____

(2) Subcategory _____

Fee Calculation/Comments: _____

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WASTEWATER DISCHARGE PERMIT FEE PROGRAM

September 20, 1991

TERRY L. CUMMINGS
ADVANCED SILICON MATERIALS INC
P.O. BOX 1667
MOSES LAKE, WA 98837-0258

Permit Number: WA0045241

This letter is a pre-billing notice to inform you what your permit fee will be for the second half (January 1 - June 30, 1991) of Fiscal Year 92 (FY92) under the proposed fee rule amendments. It is anticipated that bills will be mailed in March 1992.

Ecology has already sent out billing statements under the existing regulation which will recover \$1.8 million dollars out of the total two year program cost of \$14.5 million dollars. Billing options have been discussed with various dischargers and the Ecology fiscal office. Out of these discussions, two options seem to be deemed the most favored. These options are:

Option 1:

Fiscal Year 1992 -

First billing (July 1 - Dec. 30, 1991) recover \$1.8 million dollars.

Second billing (Jan. 1 - June 30, 1992) recover \$5.45 million dollars.

Fiscal Year 1993 -

First and second billings, recover \$3.6 million dollars each billing.

Option 2:

Fiscal Year 1992 -

First billing (July 1 - Dec. 30, 1991) recover \$1.8 million dollars.

Second billing (Jan. 1 - June 30, 1992) recover \$4.2 million dollars.

Fiscal Year 1993 -

First and second billings, recover \$4.2 million dollars each billing.

Both options are designed to recover \$14.5 million dollars over the biennium. Option 1 has a high second billing with billings dropping for the second year of the biennium whereas Option 2 levels out the last three billings.

Initial reactions indicate that Option 2 may be preferred by permittees. However, this is open for discussion at the public workshops/hearings. The fee schedule in the proposed regulation is based on Option 2 and contains three columns of fees. The columns for FY92 and FY93 reflect the fee increase as described in Option 2. The column for Post FY93 Permit Fees shows what the annual fee will be after July 1, 1992 based on current appropriation from the legislature..

Based on Option 2 and the current file information on your facility, your permit fee for the second half of FY92 has been calculated as follows:

Permit Fee Category: NONFERROUS METALS FORMING

Subcategory1:

Subcategory2:

SECOND SEMIANNUAL BILLING (after deducting money received from FY92 first half billing): 5750.00

FY92 ANNUAL PERMIT FEE: 8250.00

If you have any questions regarding your permit fee assessment, please contact the Permit Fee Unit at (206) 438-7039.

BAP:pb

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WASTEWATER DISCHARGE PERMIT FEE PROGRAM

July 15, 1991

TERRY L. CUMMINGS
ADVANCED SILICON MATERIALS INC
P.O. BOX 1667
MOSES LAKE, WA 98837-0258

Permit Number: WA0045241

This letter is a pre-billing notice to inform you what your permit fee will be for the first half (July 1 - December 31, 1991) of Fiscal Year 1992. The Ecology Fiscal Office is preparing the permit fee first semi-annual billings and will mail invoices early in August, 1991.

Based on the current file information, your permit has been placed in the following fee category:

NOTICE - THIS IS NOT A BILL

Permit Fee Category: NONFERROUS METALS FORMING
Subcategory1:
Subcategory2:

First Semi-Annual Fee Billing: 2500.00

If you have any questions or do not agree with your permit fee assessment, please contact the Permit Fee Unit at (206) 438-7039.

BAP:pb

NOTE: The Department is amending Ch. 173-224 WAC which will raise permit fees for all dischargers beginning in 1992. You will be receiving more information about this rule amendment shortly.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

March 11, 1991

Mr. Terry L. Cummins
Advanced Silicon Materials, Inc.
P.O. Box 1667
Moses Lake, WA 98837-0258

Re: Wastewater Discharge Permit Fee Category Reclassification

Dear Mr. Cummins:

Thank you for your letter requesting review of the permit fee classification assessed your facility. After looking at all the information and talking to Roger Ray of the Ecology Eastern Regional Office, it became apparent that we had made an error in your permit fee classification. I apologize for any inconvenience you may have suffered.

Based on all pertinent data, I concur with your findings and have changed your permit fee category to reflect the following:

Category: Non Ferrous Metals Forming
Subcategory: E - 100,000 - < 500,000 GPD
Annual Permit Fee: \$5,000.00

I have notified the Ecology fiscal office of this change. You should be hearing from them shortly.

If you have any questions, please contact me at (206) 438-7039.

Sincerely,

Beverly A. Poston
Environmentalist
Water Quality/Permit Fee Unit

BAP:pb



DISCHARGER INFORMATION CHANGES

Identification Information

Date: 3/8/91

Facility Name: Union Carbide Corp.

Permit Number: WA0045241 Permit Fee Year: 91

CHANGES (fill in only those changes):

Facility Name: Advanced Silicon Materials Inc.

Billing Address: _____

City: _____ State _____ Zip Code 98837-0258

Contact Person: _____

Contact Person Phone Number: _____

Fee Category (Job Code): PF021 Annual Permit Fee: \$5,000⁰⁰

Adjusted Permit Fee: _____

Comments: _____



TELEPHONE RECORD

Date 3/16/91
Time a.m. p.m.

CALLED BY
 CALLED

Mr./Ms. Roger Ray - ERO

Telephone _____

Address _____

RE: Union Carbide

Representing

#WA0045241

Name change to Advanced Silicon Materials.

Project

They requested fee category change based on their SIC code. Roger thinks this appropriate. They should be classified in the following %

Discussed

Nonferrous Metals Forming (PF021)
Fee - \$5,000.

I will notify facility official of change.

Signed bcw.

Advanced Silicon Materials Inc.

P.O. BOX 1667, MOSES LAKE, WA 98837-0258 PHONE (509) 765-2106 FAX (509) 766-9322

February 27, 1991

Department of Ecology
ATTN: Bev Poston
Mail Stop PV-11
Prudential Building
Olympia, WA 98504-8711

Dear Ms. Poston:

RE: Request for Reclassification of
Industrial Facility Category/
NPDES Waste Discharge Permit No. WA-004524-1

In reviewing Chapter 173-224 WAC, WASTEWATER DISCHARGE PERMIT FEES, and this corporations' last permit fee invoice, it appears that this facility may be incorrectly categorized as "Facilities not otherwise classified, e. 100,000 - < 500,000 gpd". The preceding statement is supported by the following:

1. The primary SIC code for this corporation, as stated on our NPDES permit application is 3339, Primary Nonferrous Metals,
2. The definition of "Nonferrous metals forming" per WAC 173-224-030 (31) agrees with operations performed at this facility, and,
3. The category of "Non Ferrous Metals Forming" in WAC 173-224-040 appears applicable to the above.

This facility is therefore requesting consideration for reclassification to the category of "Non Ferrous Metals Forming" in WAC 173-224-040.

Thank you in advance for consideration of this request. Please call if you have any questions or if additional information is required.

Sincerely,



T.L. Cummings
Environmental Engineer

cc: D.R. Haley
H.D. Unland
R.K. Ray, DOE, Spokane, WA

1944

1. The first part of the report deals with the general situation of the country and the progress of the war. It is a very interesting and informative account of the events of the year.

2. The second part of the report deals with the economic situation of the country. It is a very detailed and accurate account of the economic conditions of the year.

3. The third part of the report deals with the social situation of the country. It is a very interesting and informative account of the social conditions of the year.

4. The fourth part of the report deals with the political situation of the country. It is a very detailed and accurate account of the political conditions of the year.

5. The fifth part of the report deals with the cultural situation of the country. It is a very interesting and informative account of the cultural conditions of the year.

6. The sixth part of the report deals with the international situation of the country. It is a very detailed and accurate account of the international conditions of the year.

7. The seventh part of the report deals with the future of the country. It is a very interesting and informative account of the future of the country.

8. The eighth part of the report deals with the conclusion of the report. It is a very detailed and accurate account of the conclusion of the report.

9. The ninth part of the report deals with the appendix. It is a very interesting and informative account of the appendix.

10. The tenth part of the report deals with the index. It is a very detailed and accurate account of the index.

**STATE OF WASHINGTON
WASTEWATER DISCHARGE PERMIT FEE CATEGORY DESCRIPTION**

FACILITY

IDENTIFICATION Union Carbide Chemicals and Plastics Co., Inc.

PERMIT NUMBER WA-004524-1

REGION Eastern

REGIONAL

CONTACT Mary R. Cather

PHONE (SCAN) 545-2926

(PLEASE CIRCLE THE CORRECT PERMIT CATEGORY/SUBCATEGORY THIS FACILITY MOST ACCURATELY REFLECTS)

ALUMINUM ALLOYS

ALUMINUM & MAGNESIUM REDUCTION MILLS

ALUMINUM FORMING

AGGREGATE PRODUCTION

- a. Mineral Mining (Sand, Gravel & Rock)
 - 1. Mining only
 - 2. Mining with classification (screening and/or crushing)
 - 3. Mining with classification & washing
- b. Concrete and/or Asphalt Production

COAL MINING AND PREPARATION

- a. < 200,000 tons per year
- b. 200,000 - < 500,000 tons per year
- c. 500,000 - < 1,000,000 tons per year
- d. 1,000,000 tons per year and greater

COMBINED INDUSTRIAL WASTE TREATMENT

COMBINED SEWER OVERFLOW SYSTEM

- a. < 50 acres
- b. 50 - < 100 acres
- c. 100 - < 500 acres
- d. 500 acres and greater

CONCENTRATED ANIMAL FEEDING OPERATION

- a. < 100 Animal Units
- b. 100 - < 500 Animal Units
- c. 500 - < 1,000 Animal Units
- d. 1,000 Animal Units and greater

CROP PREPARING

FLAVOR EXTRACTION

- a. Steam Distillation
- b. Solvent Extraction

FOOD PROCESSING

FUEL AND CHEMICAL STORAGE

- a. < 100,000 bbls
- b. 100,000 - < 500,000 bbls
- c. 500,000 bbls and greater

HAZARDOUS WASTE CLEAN UP SITES

INORGANIC CHEMICALS MANUFACTURING

- a. Lime Products
- b. Fertilizer
- c. Peroxide
- d. Alkaline Earth Salts
- e. Metal Salts
- f. Acid Manufacturing
- g. Chlor-alkali

IRON AND STEEL

- a. Foundries
- b. Mills

METAL FINISHING

NON-CONTACT COOLING WATER

NONFERROUS METALS FORMING

ORE MINING

- a. Ore mining
- b. Ore mining with physical concentration processes
- c. Ore mining with physical and chemical concentration processes

ORGANIC CHEMICALS MANUFACTURING

- a. < 10,000 bbls/day
- b. 10,000 - < 50,000 bbls/day
- c. 50,000 bbls/day and greater

PETROLEUM REFINING

- a. < 10,000 bbls/day
- b. 10,000 - < 50,000 bbls/day
- c. 50,000 bbls/day and greater

PHOTOFINISHERS

POWER AND/OR STEAM PLANTS

- a. Steam Generation - Nonelectric
- b. Hydroelectric
- c. Non-Fossil Fuel
- d. Fossil Fuel

PULP, PAPER AND PAPER BOARD

- a. Fiber Recyclers
- b. Paper Mills
- c. Groundwood Pulp Mills
 - 1. < 300 tons per day
 - 2. 300 tons per day and greater
- d. Chemical Pulp Mills without Chlorine Bleaching
- e. Chemical Pulp Mills with Chlorine Bleaching

SHIPYARDS (PLEASE INSERT THE NUMBER OF...)

- ___ - cranes, travel lifts, small boat lifts
- ___ - drydocks under 250 feet in length
- ___ - graving docks
- ___ - marine ways
- ___ - sycrolifts
- ___ - drydocks over 250 feet in length

SOLID WASTE SITES

- a. Non-putrescible
- b. < 50 acres
- c. 50 - < 100 acres
- d. 100 - < 250 acres
- e. 250 acres and greater

STORM WATER ONLY

- a. < 50 acres
- b. 50 - < 100 acres
- c. 100 - < 500 acres
- d. 500 acres and greater

TEXTILE MILLS

TIMBER PRODUCTS

- a. Log Storage
- b. Veneer
- c. Sawmills
- d. Hardwood, Plywood
- e. Wood Preserving

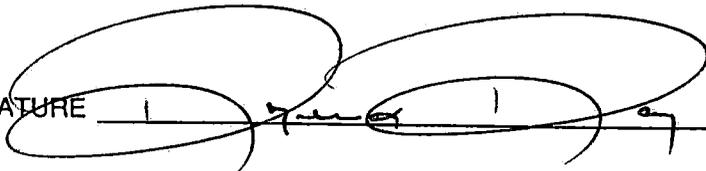
VEHICLE MAINTENANCE, WAREHOUSE & FREIGHT TRANSFER

- a. < 0.5 acre
- b. 0.5 - < 1.0 acre
- c. 1.0 acre and greater

WATER PLANTS

- a. Potable Water Treatment
- b. Irrigation Water Treatment

FACILITIES NOT OTHERWISE CLASSIFIED

SIGNATURE  DATE 1-2-90

This form will be used to assign permit fees. Please direct any questions to the Headquarters Water Quality Permit Fee Unit at SCAN 585-7039.