

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

This application is for a state waste discharge permit for a discharge of industrial wastewater to a publicly-owned treatment works (POTW) as required by Chapter 90.48 RCW and Chapter 173-216 WAC. It is designed to provide Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, and the flow characteristics of the discharge.

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

SECTION A. GENERAL INFORMATION

1. Applicant Name: Specialty Minerals Inc.
2. Facility Name: Camas Plant
(if different from Applicant)
3. Applicant Mail Address: P. O. Box 1046
Street

Camas WA 98607
City/State Zip
4. Facility Location Address: 220 NW 6th Avenue
(if different from 3 above) Street

Camas WA 98607
City/State Zip
5. UBI No.

Sometimes called a registration, tax, "C," or resale number, the Unified Business Identifier (UBI) number is a nine-digit number used to identify persons engaging in business activities. The number is assigned when a person completes a Master Business Application to register with or obtain a license from state agencies. The Departments of Revenue, Licensing, Employment Security, Labor and Industries, and the Corporations Division of the Secretary of State are among the state agencies participating in the UBI program.
6. Latitude/longitude of the facility as decimal degrees (NAD83/WGS84):
45.585 / 122.411

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

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

Vance Rowe	N American Operations Manager
Name	Title
610-882-8553	360 606-2036
Telephone number	Fax number

8. Check One:

☒ **Permit Renewal** (including renewal of temporary permits)

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

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

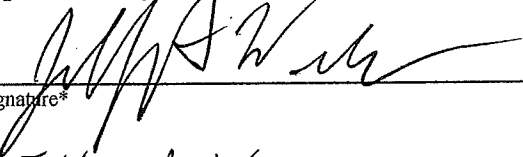
☐ **Permit Modification**

☐ **Existing Unpermitted Discharge**

☐ **Proposed Discharge**

Anticipated date of discharge: _____

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

	2/5/16	VP/CFO
Signature*	Date	Title
Jeffrey A. Weeks		
Printed Name		

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

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

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

SECTION B. PRODUCT INFORMATION

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

Description: The facility produces Precipitated Calcium Carbonate (PCC) in a water slurry form by reacting carbon dioxide with calcium hydroxide in batch reactors. The carbon dioxide is obtained from the Georgia Pacific paper mill lime kiln. The PCC plant provides PCC for use as a filler material in the production of copy and other white paper to the Georgia Pacific mill and other paper mills in the area. The primary processes are the slaking of calcium oxide with water to produce the calcium hydroxide and the subsequent reaction of carbon dioxide and calcium hydroxide to produce PCC. A centrifuge is used to increase the solids content of the PCC slurry that is shipped offsite. The applicable SIC code for the facility is 2819; Industrial Inorganic Chemicals NEC. The applicable NAICS code is 325188 - All Other Basic Inorganic Chemical Manufacturing

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

Type	RAW MATERIALS	Quantity
<i>Grapes (Example)</i>		<i>1,000 tons per year</i>
Calcium Oxide (CaO)		30,000 tons/year
Carbon Dioxide (liquid)		200 tons/year
Muriatic Acid (weak HCl)		900 gallons/year
Proprietary Materials		Confidential
Type	PRODUCTS	Quantity
<i>Grape Juice(Example)</i>		<i>300,000 gallons per year</i>
Precipitated Calcium Carbonate		55,000 tons/year

SECTION C. PLANT OPERATIONAL CHARACTERISTICS

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

Process	Waste Stream Name	Waste Stream ID#	Batch (B) or Continuous (C) Process
PCC Production	Process wastewater	1	C

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

See Attachment C-2

3. What is the maximum daily wastewater discharge flow? 333,000 gallons/day

What is the maximum average monthly wastewater discharge flow (daily flows averaged over a month)? 160,000 gallons/day

4. Describe any planned wastewater treatment improvements or changes in wastewater disposal methods, and the schedule for these improvements. (Use additional sheets, if necessary and label as attachment C4.)

None planned

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

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

Waste Stream ID#	MONTHS											
	J	F	M	A	M	J	J	A	S	O	N	D
Not Seasonal - NA												
Estimated Total Monthly Flow (GPD)												

6.

How many hours a day does this facility typically operate?

24
- How many days a week does this facility typically operate?

7
- How many weeks per year does this facility typically operate?

52

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

Materials/Quantity Stored: Lubricating Oil <250 gallons / Used Oil <110 gallons / Muriatic Acid <200 gallons

- | | | Yes | No |
|----|--|-------------------------------------|-------------------------------------|
| 8. | Some types of facilities are required to have spill or waste control plans. Does this facility have: | | |
| a. | A spill prevention, control, and countermeasure plan (40 CFR 112)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | An Oil Spill Contingency Plan (chapter 173-182 WAC)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. | An emergency response plan (per WAC 173-303-350)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. | A runoff, spillage, or leak control plan (per WAC 173-216-110(f))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. | Any spill or pollution prevention plan required by local, state or federal authorities? If yes specify: <u>State</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. | A solid waste control plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. | A Slug Discharge Control Plan (40 CFR 403.8(f)(2)(v))? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SECTION D. WATER CONSUMPTION AND WATER LOSS

1. Potable water source(s) (SEE ATTACHMENT C-2):

☒ ☐ Public System (Specify) City of Camas (via Georgia-Pacific)

☒ ☐ Private Well (Cooling Water) ☐ Surface Water

a. Water Right Permit Number: _____

b. Legal Description of Water Source

_____ ¼S, _____ ¼E, _____, Section, _____ TWN, _____ R

2. ~~Potable~~ PROCESS water use

a. Indicate total water use _____

Gallons per day (average) 250,000

Gallons per day (maximum) 460,000

b. Is water metered?

☒ YES ☐ NO

3. ~~Potable~~ COOLING (WELL) water use

a. Indicate total water use _____

Gallons per day (average) 35,000

Gallons per day (maximum) 85,000

b. Is water metered?

☒ YES ☐ NO

SECTION E. WASTEWATER INFORMATION

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

Intake: Flow meter with accumulator
Effluent Flow meter with accumulator

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

Samples for TSS are daily composite. The pH data is from a continuous pH sensor.

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

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

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

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 th ,20 th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	BOD (5 day)					SM 5210 B	/2 mg/l
	COD					SM 5220 D	/10 mg/l
X	Total suspended solids	7	1851	180	365	SM 2540 D	/5 mg/l
	Fixed Dissolved Solids					SM 2540 E	
	Total dissolved solids					SM 2540 C	
	Conductivity (micromhos/cm)					SM 2510 B	
	Ammonia-N as N					SM 4500-NH ₃ C	/0.3 mg/L
X	pH	6.1	10.1	8.7	365	SM 4500-H	0.1 standard units
	Fecal coliform (organisms/100 mL)					SM 9221 E or 9222 D	
	Total coliform (organisms/100 mL)					SM 9221 B or 9222 B	
	Dissolved oxygen					SM 4500-O C/G	
	Nitrate + nitrite-N as N					SM 4500-NO ₃ E	100 µg/L
	Total kjeldahl N as N					SM 4500-N _{org} C/E/FG	300 µg/l
	Ortho-phosphate-P as P					SM 4500-P E/F	10 µg/l
	Total-phosphorous-P as P					SM 4500-P E/P/F	10 µg/l
	Total Oil & grease					EPA 1664A	1.4/5 mg/l
	NWTPH - Dx					Ecology NWTPH Dx	250/250 µg/l
	NWTPH - Gx					Ecology NWTPH Gx	250/250 µg/l
	Calcium					EPA 200.7	10 µg/l
	Chloride					SM 4500-Cl C	0.15 µg/l
	Fluoride					SM 4500-F E	.025/0.1 mg/l
	Magnesium					EPA 200.7	10/50 µg/l
	Potassium					EPA 200.7	700/ µg/l
	Sodium					EPA 200.7	29/ µg/l
	Sulfate					SM 4500-SO ₄ C/D	/200 µg/l
	Arsenic(total)					EPA 200.8	0.1/0.5 µg/l

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 th , 20 th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	Barium (total)					EPA 200.8	0.5/2 µg/l
	Cadmium (total)					EPA 200.8	.05/ .25 µg/l
	Chromium (total)					EPA 200.8	0.2/1 µg/l
	Copper (total)					EPA 200.8	0.4/2 µg/l
	Lead (total)					EPA 200.8	0.1/ .5 µg/l
	Mercury (total) pg/L					EPA 1631E	0.2/0.5 pg/l
	Molybdenum(total)					EPA 200.8	0.1/0.5 µg/l
	Nickel(total)					EPA 200.8	0.1/0.5 µg/l
	Selenium (total)					EPA 200.8	1/1 µg/l
	Silver (total)					EPA 200.8	.04/ .2 µg/l
	Zinc (total)					EPA 200.8	0.5/2.5 µg/l

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

If yes, specify how the chemical is used and the quantity used or produced:

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

If yes, specify the material and quantity used:

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

If yes, specify the pollutants and their concentration if known
(attach laboratory analyses if available as Attachment E8):

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

☐ YES ☒ NO ☐ DON'T KNOW

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

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

Listed Waste ☐ Dangerous Waste Number(s) _____

Characteristic Wastes Dangerous Waste Number(s) _____

Ignitable ☐

Reactive ☐

Corrosive ☐

TCLP ☐

State Only Dangerous Wastes Dangerous Waste Number(s) _____

Toxicity ☐

Persistent ☐

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

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

SECTION F. SEWER INFORMATION

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

As shown in the attached Process Flow Diagram, all process effluent is collected in a sump located inside the PCC building. SMI operators will provide access to the sump during an inspection.

SECTION G. OTHER PERMITS

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

The facility operates under Order 89-1162 issued by the Southwest Clean Air Agency

SECTION H. STORMWATER

1. Do you have coverage under the Washington State Industrial Stormwater NPDES General Permit? ☐ YES ☒ NO

If yes, please list the permit number here. _____

If no, have you applied for a Washington State Stormwater Industrial Stormwater General Permit? ☐ YES ☒ NO

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

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

☒ To storm sewer system *(provide name of storm sewer system operator: Georgia-Pacific Wastewater System)*

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

Specify waterbody name(s) _____

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

☐ To a Sanitary Sewer

☐ Directly to ground waters of Washington State via:

☐ Dry well

☐ Drainfield

☐ Other

3. Areas with industrial activities at facility: *(check all that apply)*

☒ Manufacturing Building

☒ Material Handling

☒ Material Storage

☐ Hazardous Waste Treatment, Storage, or Disposal *(Refers to RCRA, Subtitle C Facilities Only)*

☐ Waste Treatment, Storage, or Disposal

☐ Application or Disposal of Wastewaters

☒ Storage and Maintenance of Material Handling Equipment

☐ Vehicle Maintenance

☐ Areas Where Significant Materials Remain

☒ Access Roads and Rail Lines for Shipping and Receiving
☐ Other (please specify): _____

4. Material handling/management practices

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

<input type="checkbox"/> Solvents	<input type="checkbox"/> Hazardous Wastes
<input type="checkbox"/> Scrap Metal	<input checked="" type="checkbox"/> Acids or Alkalies
<input type="checkbox"/> Petroleum or Petrochemical Products	<input type="checkbox"/> Paints/Coatings
<input type="checkbox"/> Plating Products	<input type="checkbox"/> Woodtreating Products
<input type="checkbox"/> Pesticides	<input type="checkbox"/> Other <i>(please list)</i> : _____

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

<input type="checkbox"/> Oil/Water Separator	<input type="checkbox"/> Detention Facilities
<input checked="" type="checkbox"/> Containment	<input type="checkbox"/> Infiltration Basins
<input checked="" type="checkbox"/> Spill Prevention	<input type="checkbox"/> Operational BMPs
<input type="checkbox"/> Surface Leachate Collection	<input type="checkbox"/> Vegetation Management
<input checked="" type="checkbox"/> Overhead Coverage	<input type="checkbox"/> Other <i>(please list)</i> : _____

5. Attach a facility site map showing stormwater drainage/collection areas, disposal areas and discharge points. This may be a hand-drawn map if no other site map is available *(See example on page 16 of this application)*. Label this as attachment H.5.

Attached

SECTION I. OTHER INFORMATION

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

Used Oil removed by PSC Wahougal

625 South 32nd Street

Washougal, WA 98671

Phone #: 360.835.8743

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

Bulk raw materials are stored in covered silos and tanks. Small amounts of materials are stored in drums or totes on containments or indoors. Dry material is stored indoors. Solid waste is collected in rolloff containers. Finished and intermediate products are stored in covered tanks.

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

SECTION J. CERTIFICATIONS

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

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

(Please check the appropriate box below.)

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

☐ ☐ ☐ A Categorical Industrial User

☐ ☐ ☐ Neither of the above

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

Treatment Works Owner: _____

Street: _____

City/State: _____ Zip: _____

Signature of Treatment Works Authority Date Title

Printed Name

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

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

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

Sewer System Owner: _____

Street: _____

City/State: _____ Zip: _____

Signature of Sewer System Authority Date Title

Printed Name

DEFINITIONS

Significant Industrial User (SIU)--

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

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

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

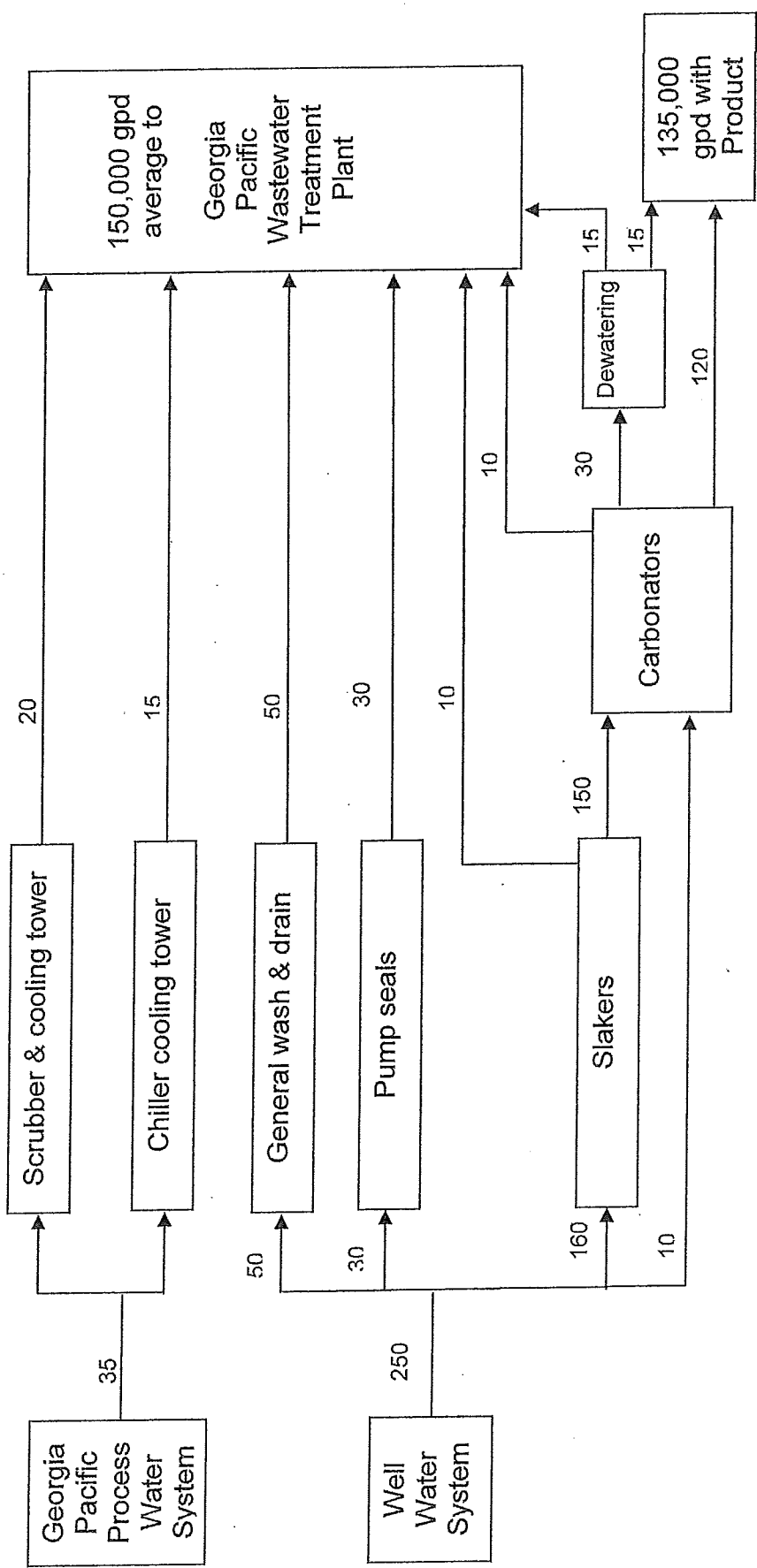
Categoric Industrial User (CIU): An industrial user subject to national categorical pretreatment standards promulgated by EPA (40 CFR 403.6 and 40 CFR parts 405-471).

Summary of Attachments That May be Required for This Application:

(Please check those attachments that are included)

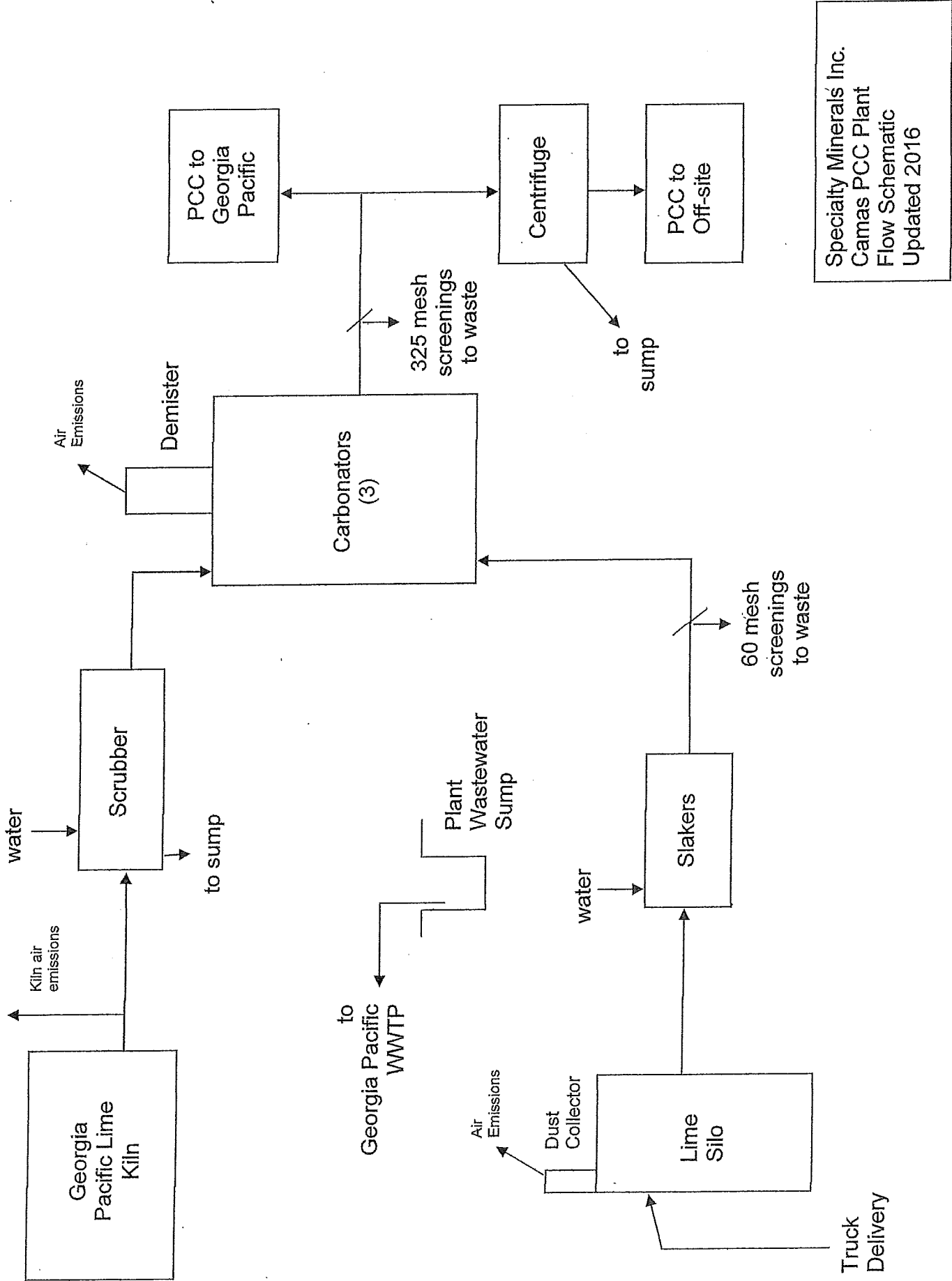
- ☒ C.2. Production schematic flow diagram and water balance
- ☐ C.4. Wastewater treatment improvements
- ☐ C.7. Additional incidental materials
- ☐ E.8. Additional results of effluent testing
- ☒ F.1. Facility site map
- ☐ H.5. Stormwater drainage map

Attachment C-2: Water Flow Balance



Note: Estimated average daily flow shown in thousand gallons. Evaporation and grit landfill losses ignored.

Specialty Minerals Inc.
Camas, Washington
Water Balance
2016



Specialty Minerals Inc.
Camas PCC Plant
Flow Schematic
Updated 2016

Specialty Minerals Inc.
Camas PCC Plant
Wastewater Sampling System

Camas PCC Plant wastewater parameters are flow, pH, and total suspended solids (TSS). Sampling and measurement is done at the pipe on the discharge of the Plant sump pump. Specific measurement and sampling is described below.

Flow

A flow meter is installed in the piping on the discharge side of the sump pump. The meter is connected to the Siemens process control computer. The flow meter output feeds an accumulator function in the Siemens. The accumulator daily totals are used to calculate flow for reporting.

pH

A pH meter is installed in the piping on the discharge side of the sump pump. The meter is connected to the Siemens. The meter output is continuously recorded in the Siemens. Each month the data is averaged and the low and high readings are determined for reporting.

TSS

A sample port is located in the piping on the discharge side of the sump pump. The sample is collected by an operator each day and the sample TSS is analyzed in the Plant lab. Each month the average and the high and low readings are determined for reporting.

