



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

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DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE

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

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

SECTION A. GENERAL INFORMATION

1. Applicant name: Dwight Hand
2. Facility name:
(if different from applicant) _____
3. Applicant mail address: P.O. Box 53
Street
Ronald, WA 98940
City/State Zip
4. Facility location
address:
(if different from above) Liberty, Washington
Street
Liberty, WA. 98922
City/State Zip
5. UBI No. 46584
Sometimes called a registration, tax, "C," or resale number, the Unified Business Identifier (UBI) number is a nine-digit number used to identify persons engaging in business activities. The number is assigned when a person completes a Master Business Application to register with or obtain a license from state agencies. The Departments of Revenue, Licensing, Employment Security, Labor and Industries, and the Corporations Division of the Secretary of State are among the state agencies participating in the UBI program.
6. Latitude/longitude of the processing facility as decimal degrees (NAD83/WGS84):
47°14'50"N 120°40'53"W 47°14'49"N 120°40'51"W
Site Location Discharge Location

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FOR ECOLOGY USE ONLY

Check One

New/Renewal ☐

Modification ☐

Date application received

Application/Permit no.

Date application accepted

Date fee paid

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

Dwight Hand Owner
Name Title
509-521-3024
Telephone number Fax number

8. Check One:



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

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

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



Permit modification



**Existing
unpermitted discharge**



Proposed discharge

Anticipated date of discharge: _____

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.

Dwight Hand
Signature*

3/7/2013
Date

Owner
Title

Dwight Hand
Printed name

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

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

Signature of delegated employee

Date

Title or function at the facility

Printed name

SECTION B. PRODUCT INFORMATION

- Briefly describe all manufacturing processes and products, and/or commercial activities at this facility. Provide the applicable Standard Industrial Classification (SIC) Code(s) for each activity (see *Standard Industrial Classification Manual*, 1987 ed.).

Description:

My ore processing mill crushes ore material to extract the gold and silver metals.

I use a Jaw crusher, ball mill and a concentrating table to achieve this process.

This is all done by using water and gravity.

I collect the heavy concentrates off the end of table in five gallon buckets.

The rest of the waste rock and water flows directly into a settling pond where it collects to evaporate and perk into the substrat.

- List raw materials and products:

Type	RAW MATERIALS	Quantity
Quartz, Slate, shale basalt		
Type	PRODUCTS	Quantity
concentrate from milling process		

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

2. On a separate sheet, produce a schematic drawing showing production processes, water flow through the facility and wastewater treatment devices. The drawing should indicate the source of intake water and the operations contributing wastewater to the effluent. The treatment units should be labeled. Construct the water balance by showing average flows between intakes, operations, treatment units, and points of discharge to land. If a water balance cannot be determined (*e.g., for certain mining activities*), provide a description of the nature and amount of any sources of water and any collection or treatment measures.

3. What is the maximum daily discharge flow: 3000 gallons/day?

What is the maximum average monthly discharge flow (daily flows averaged over a month): 30,000 gallons/day?

4. Describe any planned wastewater treatment improvements or changes in wastewater disposal methods and the schedule for the improvements or changes. (*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. List discharge for each wastestream in gallons per day (GPD). The combined value for each month should equal the estimated total monthly flow.

Waste Stream ID#	MONTHS											
	J	F	M	A	M	J	J	A	S	O	N	D
Estimated Total Monthly Flow (GPD)												

6. How many hours a day does this facility typically operate? 8
 How many days a week does this facility typically operate? 2
 How many weeks per year does this facility typically operate? 20

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

Materials/Quantity Stored:

None

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)? ☐ YES ☒ NO
 b. An Emergency Response Plan (per WAC 173-303-350)? ☐ YES ☒ NO
 c. A Runoff, spillage, or leak control plan (per WAC 173-216-110(f))? ☐ YES ☒ NO
 d. Any spill or pollution prevention plan required by local, State or Federal authorities? If yes specify: _____ ☐ YES ☒ NO
 e. A Solid Waste Management Plan? ☐ YES ☒ NO

SECTION D. WATER CONSUMPTION AND WATER LOSS

1. Water source(s):

☐ Public System (Specify) _____

☐ Private Well

☒ Surface Water

a. Water Right Permit Number: S4-27833T

b. Legal Description of Water Source:

SE $\frac{1}{4}$ S, SW $\frac{1}{4}$ S, 2 Section, 20N TWN, 17E R

2. Water use

a. Indicate total water use:

Gallons per day (average)

3000

Gallons per day (maximum)

5000

b. Is water metered?

☐ YES ☒ NO

SECTION E. WASTEWATER INFORMATION

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

Intake:

Storage Tank usage

Effluent:

Storage Tank usage

2. Provide measurements for treated wastewater prior to land application for the parameters with an "X" in the left column. Use the analytical methods given in the table unless an alternate method is approved by Ecology. All analyses (except pH) must be conducted by a laboratory registered or accredited by the Department of 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 values under maximum.

X	Parameter	Concentrations Measured			Number of Analyses	Analytical Method Std. Methods 19th edition	Detection Limit
	BOD (5 day)	Minimum	Maximum	Average		5210	2 mg/l
	COD					5220 B, C, or D	5 mg/l
	Total Suspended Solids					2540D	1 mg/l
	Total Dissolved Solids					2540 C	
	Conductivity					2510 B	
	Ammonia-N					4500-NH ₃ C	20 µg/l
	pH					4500-H	0.1 units
	Total Residual Chlorine					4500-Cl E	1 mg/l
	Fecal Coliform					9222 D	
	Total Coliform					9221 B or 9222 B	
	Dissolved Oxygen					4500-O C or 4500-O G	
	Nitrate + Nitrite-N					4500-NO ₃ E	0.5 mg/l
	Total Kjeldahl N					4500-N _{org}	20 µg/l
	Ortho-phosphate-P					4500-P E or 4500-P F	1 µg/l
	Total-phosphate-P					4500-P B.4.	1 µg/l
	Total Oil & Grease					5520 C	0.2 mg/l

X	Parameter	Concentrations Measured			Number of Analyses	Analytical Method Std. Methods 19th edition	Detection Limit
		Minimum	Maximum	Average			
	Total Petroleum Hydrocarbon					5520 C, F	0.2 mg/l
	Calcium					3500-Ca B	3 µg/l
	Chloride					4500-Cl C	0.15 µg/l
	Fluoride					4500-F D	0.1 mg/l
	Magnesium					3500-Mg B	0.5 µg/l
	Potassium					3500-K B	5 µg/l
	Sodium					3500-Na B	2 µg/l
	Sulfate					4500-SO ₄ E	1 mg/l
	Barium (total)					3500-Ba B	30 µg/l
	Cadmium (total)					3500-Cd B	5 µg/l
	Chromium (total)					3500-Cr B	50 µg/l
	Copper (total)					3500-Cu B	20 µg/l
	Iron (total)					3500-Fe B	20 µg/l
	Lead (total)					3500-Pb B	100 µg/l
	Manganese (total)					3500-Mn B	10 µg/l
	Mercury					3500-Hg B	0.2 µg/l
	Selenium (total)					3500-Se C	2 µg/l
	Silver (total)					3500-Ag B	10 µg/l
	Zinc (total)					3500-Zn B	5 µg/l

3. Describe the collection method for the samples which were analyzed above (ie. grab, 24 hour composite).

None taken

4. Has the effluent been analyzed for any other parameters than those identified in question E.2.? If
yes, when? Attach results and label attachment E.4. (Note: Ecology may require additional testing.) ☐
YES ☒ NO
5. Does this facility use any of the following chemicals as raw materials in production, produce them as part of the manufacturing process, or are they present in the wastewater? (The number following the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.) ☐ YES
☒ NO

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

Acrylamide/79-06-1
Acrylonitrile/107-13-1
Aldrin/309-00-2
Aniline/62-53-3
Aramite/140-57-8
Arsenic/7440-38-2
Azobenzene/103-33-3
Benzene/71-43-2
Benzidine/92-87-5
Benzo(a)pyrene/50-32-8
Benzotrichloride/98-07-7
Benzyl chloride/100-44-7
Bis(chloroethyl)ether/111-44-4
Bis(chloromethyl)ether/542-88-1
Bis(2-ethylhexyl) phthalate/
117-81-7
Bromodichloromethane/75-27-4
Bromoform/75-25-2
Carbazole/86-74-8
Carbon tetrachloride/56-23-5
Chlordane/57-74-9
Chlorodibromomethane/124-48-1
Chloroform/67-66-3
Chlorthalonil/1897-45-6
2,4-D/94-75-7
DDT/50-29-3
Diallate/2303-16-4
1,2 Dibromoethane/106-93-4
1,4 Dichlorobenzene/106-46-7
3,3' Dichlorobenzidine/91-94-1
1,1 Dichloroethane/75-34-3
1,2 Dichloroethane/107-06-2
Nitrofurazone/59-87-0

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

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

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

If yes, specify the material and quantity used.

7. Are there other pollutants that you know of or believe to be present?
If yes, specify the pollutants and their concentration if known
(attach laboratory analyses if available).

☐ YES ☒ NO
☐ DON'T KNOW

SECTION G. SITE ASSESSMENT

The local library and local city or county planning offices may be helpful in providing the information required in this section. The Department of Ecology Water Resources Section can be consulted for identifying wells within one mile of your site.

1. Give the legal description of the land treatment site(s) by section/township/range and provide the latitude/longitude (center of the site). Indicate owner for each site. Give the acreage of each land treatment site(s). Attach a copy of the contract(s) authorizing use of land for each treatment site.

2. If this is a new discharge, list all environmental control permits or approvals needed for this project; for example, SEPA review, septic tank permits, sludge application permits, or air emissions permits.

3. Attach an original United States Geological Survey (USGS) 7.5 minute topographic map. USGS topographical maps are available from the Department of Natural Resources (360 902-1234), Metsker Maps (206 588-5222), some local bookstores and internet vendors. Show the following on this map:

- a. Location and name of internal and adjacent streets.
- b. Surface water drainage systems within ¼ mile of the site.
- c. All wells within 1 mile of the site.
- d. Wastewater discharge points.
- e. Land uses and zoning adjacent to the wastewater application site.
- f. Ground water gradient.

*See
attachments*

4. Describe soils on the site using information from local soil survey reports. Soils information is available from your local County Conservation District. *(Submit on separate sheet and label as attachment G.4.)*
5. Describe the local geology and hydrogeology within one mile of the site. Include any ground water quality data. The local library or local Soil Conservation Service may have this information. *(Submit on separate sheet and label as attachment G.5.)*

SECTION F. GROUND WATER INFORMATION

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

Well ID # _____

Parameter	Range of Measurements	Number of Analyses	Analytical Method	Detection Limit
BOD (5 day)				
COD				
Total Organic Carbon				
Ammonia-N				
pH				
Total Dissolved Solids				
Conductivity				
Total Hardness				
Fecal Coliform				
Total Coliform				
Dissolved Oxygen				
Nitrate + Nitrite-N, Nitrate				
Total Kjeldahl N				
Ortho-phosphate-P				
Total-phosphate-P				
Total Petroleum Hydrocarbon				
Calcium				
Chloride				
Fluoride				
Magnesium				
Potassium				
Sodium				
Sulfate				
Barium				
Cadmium				
Chromium				
Copper				
Iron				
Lead				
Manganese				
Mercury				
Selenium				
Silver				
Zinc				
Water Level				

6. List the names and addresses of contractors or consultants who provided information and cite sources of information by title and author.

SECTION H. STORMWATER

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

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

Note: If you answered "no" to both questions above, complete the following questions 2 through 6.

2. Describe the size of the stormwater collection area.

- a. Unpaved Area _____ sq.ft.
b. Paved Area _____ sq.ft.
c. Other Collection Areas (Roofs) _____ sq.ft.

3. Does your facility's stormwater discharge to: *(Check all that apply)*

☐ Storm sewer system; name of storm sewer system *(operator):* _____

☐ Sanitary Sewer

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

Specify waterbody name _____

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

☐ Directly to ground waters of Washington State via:

☐ Dry well

☐ Drainfield

☐ Other

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

- ☐ Manufacturing Building
- ☐ Material Handling
- ☐ Material Storage
- ☐ Hazardous Waste Treatment, Storage, or Disposal *(Refers to RCRA, Subtitle C Facilities Only)*
- ☐ Waste Treatment, Storage, or Disposal
- ☐ Application or Disposal of Wastewaters
- ☐ Storage and Maintenance of Material Handling Equipment
- ☐ Vehicle Maintenance
- ☐ Areas Where Significant Materials Remain
- ☐ Access Roads and Rail Lines for Shipping and Receiving
- ☒ Other None apply

5. 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 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 checked="" type="checkbox"/> Other <i>(please list):</i> |

None apply

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

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

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

SECTION I. OTHER INFORMATION

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

None generated

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

Waste stream water is discharged directly into settling pond by gravity flow

3. Have you designated the wastes described above according to the applicable procedures of Dangerous Waste Regulations, Chapter 173-303 WAC?

☐ YES ☐ NO
☒ DON'T KNOW

Summary of Attachments That May be Required for This Application: (Please check those attachments which are included)

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

