Fact Sheet for State Waste Discharge Permit ST0007316

Artisan Finishing Systems, Inc.

Date of Public Notice: August 25, 2021

Purpose of this fact sheet

This fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed State Waste Discharge permit for Artisan Finishing Systems, Inc. (Artisan Finishing) that will allow discharge of wastewater to the City of Marysville (Marysville) sewer system.

State law requires any commercial or industrial facility to obtain a permit before discharging waste or chemicals to municipal sanitary sewer collection and treatment systems.

Ecology makes the draft permit and fact sheet available for public review and comment at least 30 days before it issues the final permit to the facility operator. Copies of the fact sheet and draft permit for Artisan Finishing, State Waste Discharge permit ST0007316, are available for public review and comment from August 25, 2021 until the close of business September 24, 2021. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement Information**.

Artisan Finishing reviewed the draft permit and fact sheet for factual accuracy. Ecology corrected any errors or omissions about the facility's location, history, product type, production rate, or discharges prior to publishing this draft fact sheet for public notice.

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 **Appendix D - Response to Comments**, and publish it when we issue the final State Waste Discharge permit. Ecology generally will not revise the rest of the fact sheet. The full document will become part of the legal history contained in the facility's permit file.

Summary

Artisan Finishing engages in metal finishing and coating for industrial and commercial customers. The proposed permit is substantially the same as the previous permit, with the following major excpetions.

- The required frequency of chromium monitoring was reduced.
- The total toxic organics parameters list was modified.
- The effluent flow limit was increased from 5,000 to 7,000 gallons per day.

Table of Contents

I. Introduction

The legislature defined Ecology's authority and obligations for the wastewater discharge permit program in the Water Pollution Control law, chapter 90.48 RCW (Revised Code of Washington).

Ecology adopted rules describing how it exercises its authority:

- State waste discharge program (chapter 173-216 WAC)
- Submission of plans and reports for construction of wastewater facilities (chapter 173-240 WAC)

These rules require any industrial facility owner/operator to obtain a State Waste Discharge permit before discharging wastewater to state waters. This rule includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. They also help define the basis for limits on each discharge and for other performance requirements imposed by the permit.

Under the State Waste Discharge permit program and in response to a complete and accepted permit application, Ecology generally prepares a draft permit and accompanying fact sheet, and makes it available for public review before final issuance. If the volume of the discharge has not changed or if the characteristics of the discharge have not changed Ecology may choose not to issue a public notice. When Ecology publishes an announcement (public notice); it tells people where they can read the draft permit, and where to send their comments, during a period of 30 days. (See **Appendix A - Public Involvement Information** for more detail about the public notice and comment procedures). After the public comment period ends, Ecology may make changes to the draft State Waste Discharge permit in response to comment(s). Ecology will summarize the responses to comments and any changes to the permit in **Appendix D**.

II. Background Information

Table 1: General Facility Information

Facility Information	
Applicant	Artisan Finishing Systems, Inc.
Facility Name and Address	Artisan Finishing Systems, Inc. 14219 Smokey Point Blvd, Building #6 Marysville, WA 98271
Contact at Facility	Name: Kris Black Title: Manager Telephone #: (360) 658-0686
Responsible Official	Name: Tyler Brown Title: Owner
Industrial User Type	Categorical Industrial User
Industry Type	Metal Finishing

Facility Information	
Categorical Industry	40 CFR Part 433.17
Permit Fee Category (WAC 173-224)	Metal Finishing; b. 1,000 -< 10,000 gpd
Type of Treatment by Industry	Chromium reduction, chemically-aided metal precipitation, and pH neutralization
SIC Codes	3471
NAIC Codes	332813
Facility Location (NAD83/WGS84 reference datum)	Latitude: 48.1257 Longitude: -122.1779
Treatment Plant Receiving Discharge	City of Marysville Wastewater Treatment Plant (WWTP) NPDES Permit WA0022497
Discharge Location of the WWTP (NAD83/WGS84 reference datum)	Steamboat Slough (Outfall 001) Latitude: 48.035556 Longitude: -122.172222 Port Gardner Bay (Outfall 100) Latitude: 47.969444 Longitude: -122.246667

Permit Status	
Issuance Date of Previous Permit	February 12, 2016
Application for Permit Renewal Submittal Date	September 24, 2020
Date of Ecology Acceptance of Application	November 24, 2020

Inspection Status	
Date of Last Inspection	February 2, 2021

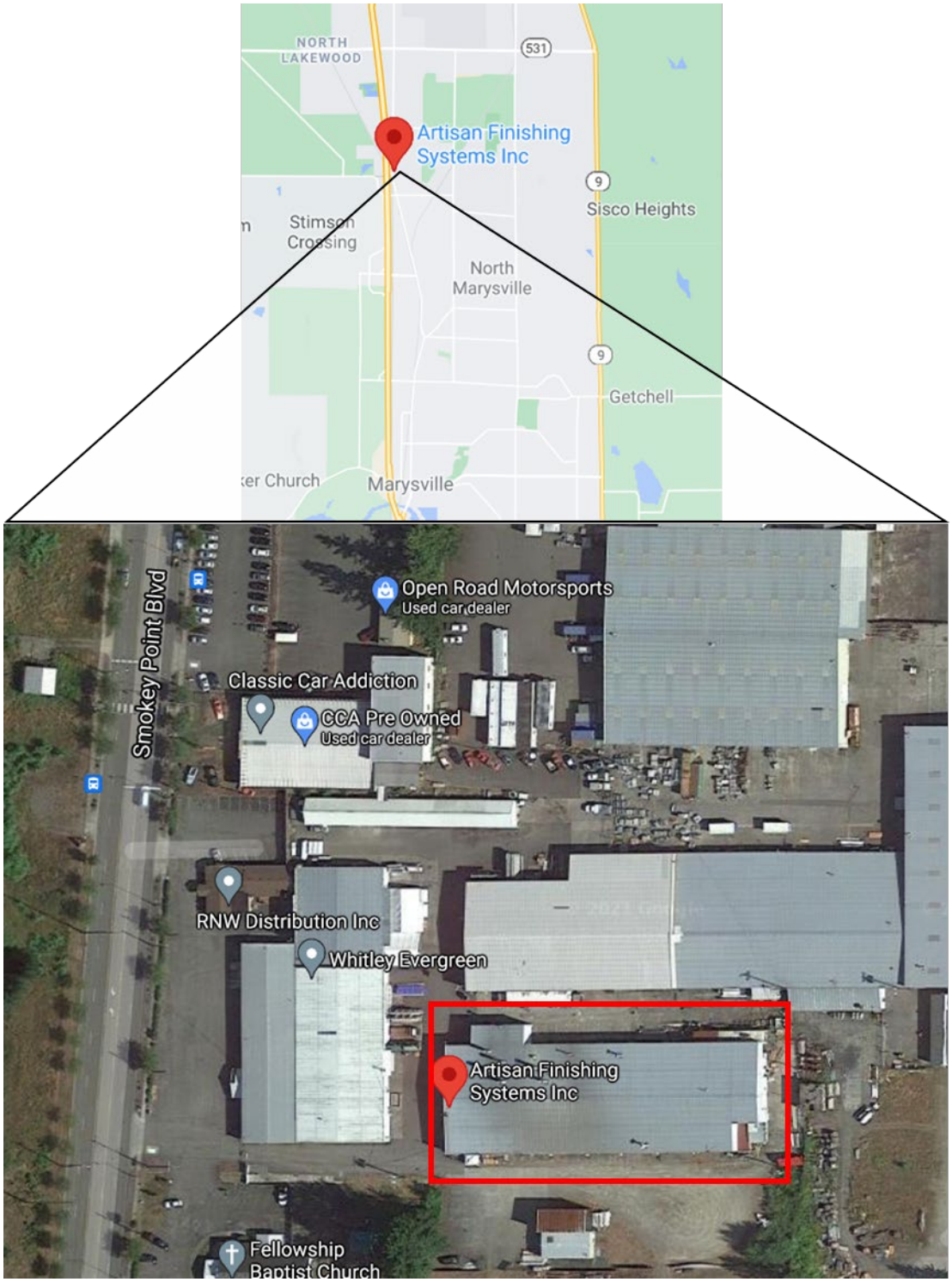

Figure 1 Facility location

A. Facility description

Industrial process(s)

Artisan Finishing conducts metal finishing of aluminum parts, such as door frames, window frames, columns, and railings. Following metal finishing surface preparation, parts are coated by an electrostatic powder coating or painted using solvent-borne thermally-cured orgranic coatings. Artisan Finishing finishes approximately 150,000 sq ft of metal per year.

Aluminum parts are received and prepared for metal finishing processes. Small amounts of solvents may be used on rags to remove any sticky residue from shipping aids.

The facility uses 2,600 gallon chemical dip and rinse tanks for the metal finishing surface preparation. The following steps occur:

- Caustic cleaning solution (sodium hydroxide) followed by a running water rinse. Potable water continuously flows into the rinse tank while excess flows by gravity to the treatment system.
- Acidic etch solution (Alumi Kote 2 – contains hydrofluoric acid) followed by a running water rinse. Similar to the alkaline rinse, water is continuously fed into the tank while excess flows by gravity to the treatment system.
- Chromium conversion solution (Alumi Kote 1 – contains phosphoric acid and chromic acid) followed by two dead rinses. Water from the second rinse tank is periodically drawn into the first rinse tank as necessary, while additional potable water is added to the second tank. Approximately 3-4 times per year, the rinse tanks are discharged to the treatment system.

The chemical solution tanks are not discharged but instead replenished with new chemical as necessary to maintain proper chemistry.

All metal finishing surface preparation process tanks are contained in a berm that is capable of containing the volume of all tanks combined.

After metal finishing surface preparation, parts are either powder coated or painted and thermally cured. No water is used in these processes.

Wastewater pretreatment

The metal finishing surface preparation processes result in wastewater from the rinse tanks. The caustic cleaner and acidic etch rinses generate the vast majority of the wastewater, with a small contribution from the infrequent discharge of the chromium rinse tank.

The caustic cleaner and acidic etch rinse tanks have low concentrations of metals, so are primarily treated for pH. These rinse tanks are discharged directly to the pH adjustment tank. The pH adjustment tank is equipped with a continuous pH meter to regulate the pH around a set point of 7. Either caustic or acid is automatically dosed to the pH adjustment tank dependent on the pH meter reading. Neutralized wastewater then

flows to a 4-chamber settling tank to remove any precipitated metals or other solids. Treated wastewater is continuously discharged to the sewer from the settling tank.

The chromium rinse tank is discharged to the chrome processing tank. Sodium metabisulfite is added to reduce chromium(VI) to chromium(III). The pH of the chrome processing tank contents is then raised by adding caustic in order to precipitate out the chromium(III). Wastewater is then transferred to the pH adjustment tank, flows to the settling tank, and is discharged to the sewer. Sludge from the metal precipitation is further processed in a filter press. The supernatant from the filter press is transferred to the pH adjustment tank.

A schematic of the wastewater generating processes and treatment system is included below in Figure 2.

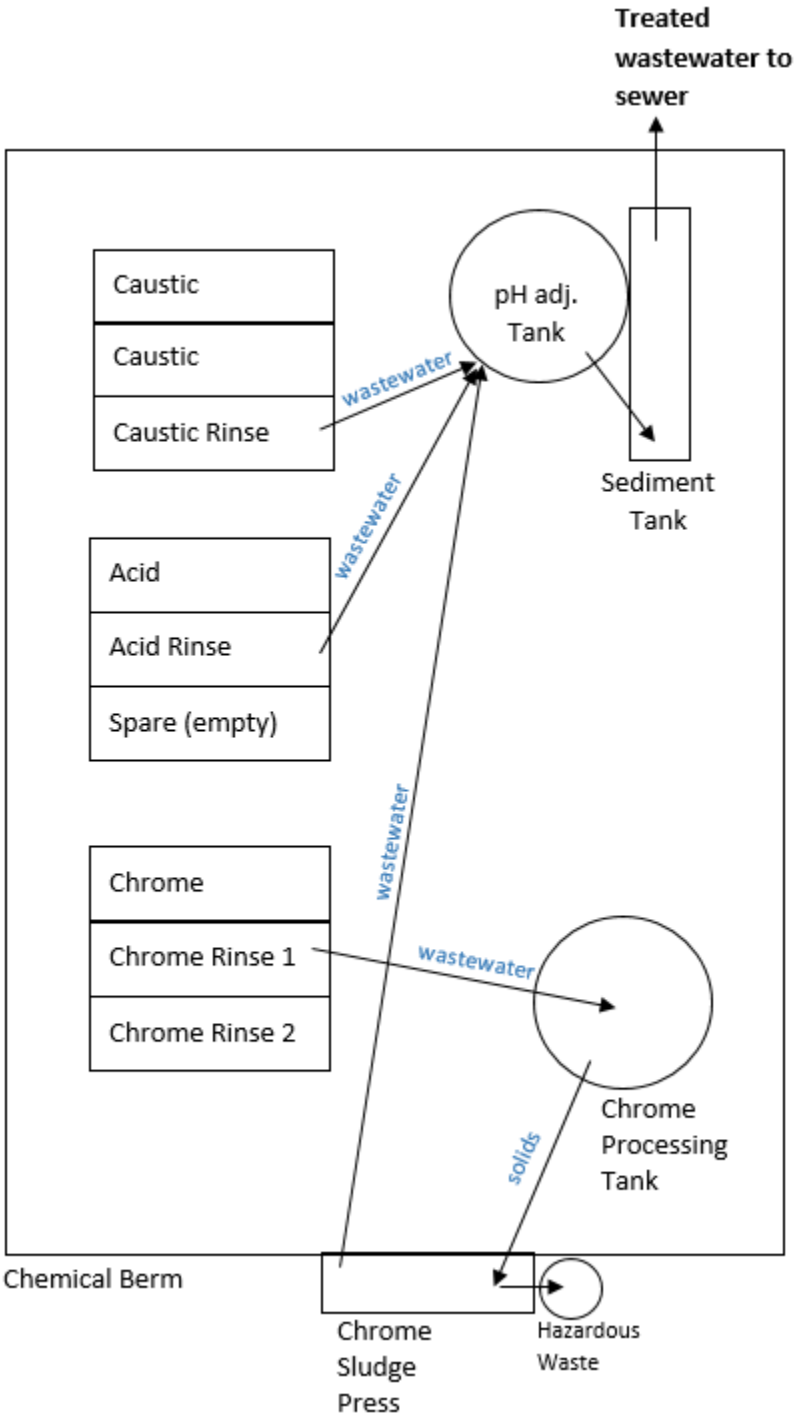

Figure 2 Process schematic

Solid wastes

Filter cakes generated in the chrome processing treatment system are disposed of as hazardous waste. Sludge from the settling tank is cleaned out periodically and is disposed of properly based on the type of hazard.

B. Discharge location to the City of Marysville

Artisan Finishing continuously discharges treated wastewater to the Marysville sewer system. Compliance grab samples for metals and cyanide are collected in the last chamber of the settling tank. The pH of the discharge is recorded continuously on a chart recorder. Artisan Finishing estimates effluent flow from the incoming potable water meter.

Marysville operates an aerated lagoon with filtration wastewater treatment system that discharges primarily to Port Gardner Bay with occasional, July through October-only, discharges to Steamboat Slough. The maximum month design flow of the WWTP is 12.7 million gallons per day (MGD) and the maximum day flow is 15.7 MGD.

C. Wastewater characterization

Artisan Finishing reported the concentration of pollutants in discharge monitoring reports. The following tabulated data also includes Ecology inspection monitoring results. The tabulated data represents the quality of the effluent discharged from March 2016 through March 2021.

Table 2: Wastewater Characterization

Parameter	Units	Average Value	Maximum Value
Flow	gpd	2,025	4,900
Cadmium, total	mg/L	0.001	0.005
Chromium, total	mg/L	0.17	1.30
Copper, total	mg/L	0.1	0.5
Lead, total	mg/L	0.005	0.003
Nickel, total	mg/L	0.038	0.087
Silver, total	mg/L	0.049	0.43
Zinc, total	mg/L	0.16	0.48
Cyanide, total	mg/L	0.20	0.65
Total Toxic Organics (40 CFR 433.11)	mg/L	0.01	0.015

Parameter	Units	Average Value	Maximum Value
Total Suspended Solids (TSS)	mg/L	6,520	6,520

Parameter	Units	Minimum Value	Maximum Value
pH	standard units	6.0	10.8

Ecology sampled for total suspended solids (TSS) during a compliance sampling event on February 2, 2021. TSS was not a required parameter for Artisan Finishing to monitor during the previous permit.

D. Summary of compliance with previous permit issued

The previous permit placed effluent limits on flow, metals (cadmium, chromium, copper, lead, nickel, silver, and zinc), cyanide, total toxic organics, and pH.

Artisan Finishing has mostly complied with the effluent limits and permit conditions throughout the duration of the permit issued on February 12, 2016. Ecology assessed compliance based on its review of the facility's information in the Ecology Permitting and Reporting Information System (PARIS), discharge monitoring reports (DMRs) and on inspections conducted by Ecology.

The following table summarizes the violations that occurred during the permit term.

Table 3: Violations

Violation	Date	Notes
Failure to properly report daily minimum and maximum pH values	March 2016 and April 2016	Continuous pH recording on circular chart for entire monitoring period, but no delineation between days. Permittee started marking the days on the circular chart beginning in May 2016. No action taken by Ecology.
September 2017 monthly DMR submitted late	September 2017	The DMR was submitted two days after the due date. No action taken by Ecology.
Frequency of pH monitoring violation	June 2018	No pH monitoring for 5 days in June 2018. Ecology sent a warning letter to the permittee.
September 2018 monthly DMR submitted late	September 2018	The DMR was submitted one day after the due date. No action taken by Ecology.

Violation	Date	Notes
July 2020-December 2020 biannual DMR submitted late	January 2021	The DMR was submitted 5 days after the due date. No action taken by Ecology.

E. State environmental policy act (SEPA) compliance

State law exempts the issuance, reissuance or modification of any wastewater discharge permit from the SEPA process as long as the permit contains conditions that are no less stringent than federal and state rules and regulations (RCW 43.21C.0383). The exemption applies only to existing discharges, not to new discharges.

III. Proposed Permit Limits

State regulations require that Ecology base limits in a State Waste Discharge permit on the:

- Technology and treatment methods available to treat specific pollutants (technology-based). Technology-based limits are set by the EPA and published as a regulation (40 CFR 400 - 471), or Ecology develops limits on a case-by-case basis (40 CFR 125.3, and RCW 90.48). Dischargers must treat wastewater using all known, available, reasonable methods of prevention, control, and treatment (AKART).
- Effects of the pollutants on the publicly-owned treatment works (POTW). Wastewater must not interfere with the operation of the POTW. Ecology considers local limits in developing permit limits.
- Applicable requirements of other local, state and federal laws.

Ecology applies the most stringent of these limits to each parameter of concern and further describes the proposed limits below.

The limits in this permit reflect information received in the application and from supporting reports (engineering, hydrogeology, monitoring, etc.). Ecology evaluated the permit application and determined the limits needed to comply with the rules adopted by the state of Washington. Ecology does not develop effluent limits for all reported pollutants. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, and are not listed in regulation.

Ecology does not usually develop permit limits for pollutants not reported in the permit application but may be present in the discharge. The permit does not authorize the discharge of the non-reported pollutants. During the five-year permit term, the facility's effluent discharge conditions may change from those conditions reported in the permit application. The facility must notify Ecology if significant changes occur in any constituent. Until Ecology modifies the permit to reflect additional discharge of pollutants, a permitted facility could be violating its permit.

A. Technology-based effluent limits

Waste discharge permits issued by Ecology specify conditions requiring all available and reasonable methods of prevention, control, and treatment (AKART) of discharges to waters of the state (RCW 90.48).

Existing federal categorical limits for this facility are found under 40 CFR Part 433.17 (metal finishing point source category – pretreatment standards for new sources).

The state waste discharge permit regulations include restrictions and prohibitions to protect publicly-owned sewerage systems. A facility may not discharge any wastewater having a pH less than 5.0 or greater than 11.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel unless the:

- System is specifically designed to accommodate such discharge.
- Discharge is authorized by a permit (WAC 173-216-060).

Federal regulations (40 CFR 403.5b) also prohibits the discharge of pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the collection and treatment system is designed to accommodate such discharges.

The following effluent limits specified in 40 CFR 433.17 are necessary to satisfy the requirement for AKART:

Table 4: Technology Based Effluent Limits

Effluent Limits		
Parameter	**Maximum Daily**	**Monthly Average**
Cadmium, total	0.11 mg/L	0.07 mg/L
Chromium, total	2.77 mg/L	1.71 mg/L
Copper, total	3.38 mg/L	2.07 mg/L
Lead, total	0.69 mg/L	0.43 mg/L
Nickel, total	3.98 mg/L	2.38 mg/L
Silver, total	0.43 mg/L	0.24 mg/L
Zinc, total	2.61 mg/L	1.48 mg/L
Cyanide, total	1.20 mg/L	0.65 mg/L
Total toxic organics (TTOs)	2.13 mg/L	N/A

Parameter	Daily Minimum	Daily Maximum
pH	5.0 standard units	11.0 standard units

B. Effluent limits based on local limits

To protect the Marysville WWTP from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, the proposed permit includes limits on this discharge for certain parameters. Ecology based these limits on local limits established by Marysville and codified in municipal code 14.20.080 (Ordinance 2072 § 2.4, 1996). Ecology's pretreatment program delegation agreement with EPA includes language in which Ecology agreed to enforce limits adopted by non-delegated programs (local limits). Applicable local limits for this discharge include the following:

Table 5: Limits Based on Local Limits

Effluent Limits	
Parameter	**Maximum daily (based on 24-hour composite)**
Arsenic	0.71 mg/L
Cadmium	0.70 mg/L
Chromium	1.47 mg/L
Copper	0.50 mg/L
Lead	0.52 mg/L
Mercury	0.10 mg/L
Nickel	1.48 mg/L
Zinc	1.67 mg/L
Cyanide	No limit established
Silver	0.47 mg/L

Parameter	Daily Minimum	Daily Maximum
pH	5.5 standard units	10.0 standard units

The City of Marysville also has a prohibition on discharges of BOD or TSS from an individual industrial or commercial facility in excess of 750 mg/L measured at the point of connection with the city system (Marysville municipal code 14.20.050(cc)). At this time, Ecology will not include the TSS limit in the permit since the sample location is not

at the point of connection with the city system. However, Ecology is proposing adding monitoring of TSS.

C. Comparison of effluent limits with the previous permit issued on February 12, 2016

Table 6: Comparison of Effluent Limits

		Previous Effluent Limits: Outfall 001		Proposed Effluent Limits: Outfall 001	
Parameter	**Basis of Limit**	**Maximum Daily**	**Monthly Average**	**Maximum Daily**	**Monthly Average**
Flow (gpd)	N/A	5,000	N/A	7,000	N/A
Cadmium, total (mg/L)	Categorical	0.11	0.07	0.11	0.07
Chromium, total (mg/L)	Local	1.47	1.47	1.47	1.47
Copper, total (mg/L)	Local	0.5	0.5	0.5	0.5
Lead, total (mg/L)	Categorical and Local	0.52	0.43	0.52	0.43
Nickel, total (mg/L)	Local	1.48	1.48	1.48	1.48
Silver, total (mg/L)	Categorical	0.43	0.24	0.43	0.24
Zinc, total (mg/L)	Categorical and Local	1.67	1.48	1.67	1.48
Cyanide, total (mg/L)	Categorical	1.20	0.65	1.20	0.65
Total toxic organics	Categorical	2.13	N/A	2.13	N/A

Parameter	Basis of Limit	Daily Minimum	Daily Maximum
pH (standard units)	Local	5.5	10.0

Ecology is proposing to increase the flow limit in the new permit, from 5,000 gpd to 7,000 gpd. Marysville approved the change in the permit application submitted on September 24, 2020.

IV. Monitoring Requirements

Ecology requires monitoring, recording, and reporting (WAC 173-216-110) to verify that the treatment process functions correctly and that the discharge complies with the permit's effluent limits.

If a facility uses a contract laboratory to monitor wastewater, it must ensure that the laboratory uses the methods and meets or exceeds the method detection levels required by the permit. The permit describes when facilities may use alternative methods. It also describes what to do in certain situations when the laboratory encounters matrix effects. When a facility uses an alternative method as allowed by the permit, it must report the test method, detection level (DL), and quantitation level (QL) on the discharge monitoring report or in the required report.

A. Lab accreditation

Ecology requires that facilities must use a laboratory registered or accredited under the provisions of chapter 173-50 WAC, Accreditation of Environmental Laboratories, to prepare all monitoring data. Flow, pH, and internal process control parameters are exempt from this requirement.

B. Wastewater monitoring

Ecology details the proposed monitoring schedule under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

40 CFR 433.12(a) states if monitoring is necessary to measure compliance with the total toxic organic (TTO) standard, the permittee need analyze for only those pollutants which would reasonably be expected to be present. After an analysis of the Artisan Finishing process, including chemicals used in processes that generate wastewater, Ecology does not reasonably expect the following TTO parameters to be present in the discharge, and therefore, is not requiring monitoring of those TTOs listed in Table 7.

Table 7: TTOs not reasonably expected to be present in the discharge

Aldrin	Dieldrin
Chlordane	4,4-DDT
4,4-DDE	4,4-DDD
Alpha-endosulfan	Beta-endosulfan

Endosulfan sulfate	Endrin
Endrin aldehyde	Heptachlor
Heptachlor expoxide	Alpha-BHC
Beta-BHC	Gamma-BHC
Delta-BHC	PCB-1242
PCB-1254	PCB-1221
PCB-1232	PCB-1248
PCB-1260	PCB-1016
Toxaphene	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)

In addition, 40 CFR 433.12(b) and 40 CFR 433.17(d) allows the permittee to submit a toxic organic management plan (solvent management plan) for approval by Ecology. Once approval of the solvent management plan is granted, the permittee may submit a certification statement in lieu of monitoring for TTOs. Permit condition S9 outlines the requirements of the toxic organic management plan and certification statement.

The proposed permit requires additional monitoring of TSS to further characterize the facility's wastewater. TSS can have a significant impact on the receiving POTW and Marysville has codified an upper limit cap on discharges of TSS to the sewer system.

V. Other Permit Conditions

A. Reporting and recordkeeping

Ecology based Special Condition S3 on its authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 173-216-110 and CFR 403.12 (e),(g), and (h)].

B. Operations and maintenance

Ecology requires dischargers to take all reasonable steps to properly operate and maintain their wastewater treatment system in accordance with state regulations (WAC 173-240-080 and WAC 173-216-110). The permittee must submit an O&M Manual for Ecology review and approval.

C. Prohibited discharges

Ecology prohibits certain pollutants from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (chapter 173-216 WAC) and the

discharge of designated dangerous wastes not authorized by this permit (chapter 173-303 WAC).

D. Dilution prohibited

Ecology prohibits the facility from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limits.

E. Slug discharge plan

Ecology determined that Artisan Finishing has the potential for a batch discharge or a spill that could adversely affect the treatment plant, therefore the proposed permit requires a slug discharge control plan be maintained [(40 CFR 403.8 (f)(l) (iii)(B)(6) and (f) (2)(vi)].

F. Toxic organic management plan and TTO monitoring waiver

40 CFR 433.12(b) and 40 CFR 433.17(d) allows the permittee to submit a toxic organic management plan (solvent management plan) for approval by Ecology. Once approval of the solvent management plan is granted, the permittee may submit a certification statement in lieu of monitoring for TTOs.

G. General conditions

Ecology bases the standardized general conditions on state law and regulations. They are included in all state waste discharge permits issued by Ecology.

VI. Public Notification of Noncompliance

Ecology may annually publish a list of all industrial users in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters in a local newspaper. Accordingly, this permit Special Condition informs the Facility that noncompliance with this permit may result in publication of the noncompliance.

VII. Permit Issuance Procedures

A. Permit modifications

Ecology may modify this permit to impose or change the numerical limits, if necessary to comply with changes in the pretreatment requirements, conditions in local sewer ordinances, or based on new information from sources such as inspections and effluent monitoring. It may also modify this permit to comply with new or amended state or federal regulations.

B. Proposed permit issuance

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limits and conditions believed necessary to control toxics. Ecology proposes that the permit be issued for five years.

VIII. References for Text and Appendices

U.S. Environmental Protection Agency.

Guidance Manual for Implementing Total Toxic Organics (TTO) Pretreatment Standards, September 1985. (https://www.epa.gov/npdes/pubs/owm0021.pdf)

Washington State Department of Ecology.

Laws, Rules & Rulemaking (https://ecology.wa.gov/About-us/How-we-operate/rulemaking)

Permit and Wastewater Related Information (https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance)

Permit Writer's Manual, July 2018. Publication Number 92-109 (https://apps.ecology.wa.gov/publications/documents/92109.pdf)

Appendix A - Public Involvement Information

Ecology proposes to issue a permit to Artisan Finishing. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology will place a Public Notice of Draft on August 25, 2021 in the Everett Herald to inform the public and to invite comment on the proposed draft State Waste Discharge permit and fact sheet.

The notice:

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website).
- Offers to provide the documents in an alternate format to accommodate special needs.
- 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.

Ecology has published a document entitled Frequently Asked Questions about Effective Public Commenting, available at https://apps.ecology.wa.gov/publications/documents/0307023.pdf.

You may obtain further information from Ecology by telephone, (206) 594-0000, or by writing to the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
PO Box 330316
Shoreline, WA 98133-9716

The primary author of this permit and fact sheet is Maia Hoffman.

Appendix B - Your Right to Appeal

You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of the final permit. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2) (see glossary).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	**Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Appendix C - Glossary

AKART - The acronym for "all known, available, and reasonable methods of prevention, control and treatment." AKART is a technology-based approach to limiting pollutants from wastewater discharges, which requires an engineering judgment and an economic judgment. AKART must be applied to all wastes and contaminants prior to entry into waters of the state in accordance with RCW 90.48.010 and 520, WAC 173-200-030(2)(c)(ii), and WAC 173-216-110(1)(a).

Alternate point of compliance - An alternative location in the groundwater from the point of compliance where compliance with the groundwater standards is measured. It may be established in the groundwater at locations some distance from the discharge source, up to, but not exceeding the property boundary and is determined on a site specific basis following an AKART analysis. An "early warning value" must be used when an alternate point is established. An alternate point of compliance must be determined and approved in accordance with WAC 173-200-060(2).

Annual average design flow (AADF) - Average of the daily flow volumes anticipated to occur over a calendar year.

Average monthly (intermittent) discharge limit - The average of the measured values obtained over a calendar months time taking into account zero discharge days.

Average monthly discharge limit - The average of the measured values obtained over a calendar month's time.

Best management practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD5 - Determining the five-day Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD5 is used in modeling to measure the reduction of dissolved oxygen in receiving waters after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD_5 is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass - The intentional diversion of waste streams from any portion of a treatment facility.

Categorical pretreatment standards - National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties, which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Clean water act (CWA) - The federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance inspection-without sampling - A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance inspection-with sampling - A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations. In addition it includes as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Ecology may conduct additional sampling.

Composite sample - A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Continuous monitoring - Uninterrupted, unless otherwise noted in the permit.

Date of receipt - This is defined in RCW 43.21B.001(2) as five business days after the date of mailing; or the date of actual receipt, when the actual receipt date can be proven by a preponderance of the evidence. The recipient's sworn affidavit or declaration indicating the date of receipt, which is unchallenged by the agency, constitutes sufficient evidence of actual receipt. The date of actual receipt, however, may not exceed forty-five days from the date of mailing.

Detection limit - The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the pollutant concentration is above zero and is determined from analysis of a sample in a given matrix containing the pollutant.

Distribution uniformity - The uniformity of infiltration (or application in the case of sprinkle or trickle irrigation) throughout the field expressed as a percent relating to the average depth infiltrated in the lowest one-quarter of the area to the average depth of water infiltrated.

Enforcement limit - The concentration assigned to a contaminant in the groundwater at the point of compliance for the purpose of regulation, [WAC 173-200-020(11)]. This limit assures that a groundwater criterion will not be exceeded and that background water quality will be protected.

Engineering report - A document that thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report must contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab sample - A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Industrial user - A discharger of wastewater to the sanitary sewer that is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial wastewater - Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated stormwater and, also, leachate from solid waste facilities.

Interference - A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local limits - Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Major facility - A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum daily discharge limit - The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is the maximum discharge of a pollutant measured during a calendar day.

Maximum day design flow (MDDF) - The largest volume of flow anticipated to occur during a one-day period, expressed as a daily average.

Maximum month design flow (MMDF) - The largest volume of flow anticipated to occur during a continuous 30-day period, expressed as a daily average.

Maximum week design flow (MWDF) - The largest volume of flow anticipated to occur during a continuous 7-day period, expressed as a daily average.

Method detection level (MDL) - See Detection Limit.

Minor facility - A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

National pollutant discharge elimination system (NPDES) - The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been

delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both state and federal laws.

pH - The pH of a liquid measures its acidity or alkalinity. It is the negative logarithm of the hydrogen ion concentration. A pH of 7 is defined as neutral and large variations above or below this value are considered harmful to most aquatic life.

Pass-through - A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

Point of compliance - The location in the groundwater where the enforcement limit must not be exceeded and a facility must comply with the Ground Water Quality Standards. Ecology determines this limit on a site-specific basis. Ecology locates the point of compliance in the groundwater as near and directly downgradient from the pollutant source as technically, hydrogeologically, and geographically feasible, unless it approves an alternative point of compliance.

Potential significant industrial user (PSIU) - A potential significant industrial user is defined as an Industrial User that does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;

b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).Ecology may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation level (QL) - Also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to (1,2,or 5) x 10^n, where n is an integer. (64 FR 30417).
ALSO GIVEN AS:
The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).

Reasonable potential - A reasonable potential to cause a water quality violation, or loss of sensitive and/or important habitat.

Responsible corporate officer - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sample Maximum - No sample may exceed this value.

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.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug discharge - Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate that may cause interference or pass through with the POTW or in any way violate the permit conditions or the POTW's regulations and local limits.

Solid waste - All putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

Soluble BOD_5 - Determining the soluble fraction of Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of soluble organic material present in an effluent that is utilized by bacteria. Although the soluble BOD_5 test is not specifically described in

Standard Methods, filtering the raw sample through at least a 1.2 um filter prior to running the standard BOD_5 test is sufficient to remove the particulate organic fraction.

State waters - Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater - That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based effluent limit - A permit limit based on the ability of a treatment method to reduce the pollutant.

Total dissolved solids - That portion of total solids in water or wastewater that passes through a specific filter.

Total suspended solids (TSS) - Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Upset - 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, lack of preventative maintenance, or careless or improper operation.

Water quality-based effluent limit - A limit imposed on the concentration of an effluent parameter to prevent the concentration of that parameter from exceeding its water quality criterion after discharge into receiving waters.

Appendix D - Response to Comments

[Ecology will complete this section after the public notice of draft period.]