

Electronic Tools for Successful Permitting

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Tools for Permit Development

Standardizing Permits

- Permit Calc Spreadsheet
 - Continuous Discharge RPA for Marine and Fresh Waters
 - Aquatic Life and HHC
- Shells for Individual NPDES and SWDP Factsheets & Permits



Permit Calc Inputs

Dilution Factor Calculations and Receiving Water Critical Conditions

Step 1: Enter Waterbody Type

Water Body Type	Freshwater
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Facility Name	Anytown USA W/WTP
Receiving Water	Columbia River

Step 2: Enter Dilution Factors -OR- Calculate DFs by entering Facility/Receiving Water Flow Data

Do you want to enter dilution factors -or- flow data?	Flow Data
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	Annual Average	Max Monthly Average	Daily Max
Facility Flow, MGD	25	40	60
Facility Flow, cfs (calculated)	38.68	61.88	92.82

	Condition	Receiving Water Flow, cfs	Allowable % of river flow	Max Dilution Factor Allowed
Aquatic Life - Acute	7Q10	25000	0.025	7.7
Aquatic Life - Chronic	7Q10	25000	0.25	102.0
HH-Non-Carcinogen	30Q5	35000	0.25	142.4
HH-Carcinogen	Harmonic Mean	75000	0.25	485.8
Whole river at 7Q10	7Q10	25000	1	405.0

Step 3: Enter Critical Data

	Effluent	Receiving Water
Temp, °C	17	19
pH, s.u.	7.4	6.8
Alkalinity, mg/L as CaCO3	65	62
Hardness, mg/L CaCO3	100	110
Salinity, psu		
Receiving water TSS, mg/L (leave blank if unknown)		
If TSS is annual data, enter 'A'; if from critical period, enter 'S'; if no TSS, leave blank		

Step 4: Specify if using 'Mixed' values for hardness, temperature, and pH

	Use 'Mixed Hardness' (Y/N)	Use 'Mixed Max Temp' (Y/N)	Use 'Mixed pH' (Y/N)
	N	N	N
Acute Zone Boundary	108.7	18.7	6.8
Chronic Zone Boundary	109.9	19.0	6.8
Whole river at 7Q10	110.0	19.0	6.8

Aquatic Life Limit Calculation

# of Compliance Samples Expected per month		4																		
LTA Coeff. Var. (CV), decimal		0.6																		
Permit Limit Coeff. Var. (CV), decimal		0.6																		
Waste Load Allocations, ug/L	Acute	143.9588																		
	Chronic	1256.054																		
Long Term Averages, ug/L	Acute	46.22276																		
	Chronic	662.4849																		
Limiting LTA, ug/L		46.22276																		
Metal Translator or 1?		1.00																		
Average Monthly Limit (AML), ug/L		72.0																		
Maximum Daily Limit (MDL), ug/L		144.5																		

Human Health Reasonable Potential

s	$s^2 = \ln(CV^2 + 1)$	0.554513																		
Pn	$Pn = (1 - \text{confidence level})^{1/n}$	0.779																		
Multiplier		0.652812																		
Dilution Factor		142.4027																		
Max Conc. at edge of Chronic Zone, ug/L		7.724572																		
Reasonable Potential? Limit Required?		NO																		

Human Health Limit Calculation

# of Compliance Samples Expected per month																				
Average Monthly Effluent Limit, ug/L																				
Maximum Daily Effluent Limit, ug/L																				

Comments/Notes:

References: [WAC 173-201A](#),
 Technical Support Document for Water Quality-based Toxics Control, US EPA, March 1991, EPA/505/2-90-001, pages 56/99

Permit Calc, cont.

- Fecal Coliform and pH at Edge of Chronic MZ
- Temperature RPA and Limit Development
- DO Sag
- PBELs
- Checks data for normality






Tools for Permit Management

Permitting Database

- **Permit and Reporting Information System**
 - Internal & External Interfaces
 - Increased transparency
 - Feeds ICIS



Permit Lookup



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State of Washington

Permitting and Reporting Information System
(PARIS)

[Home](#) [Facility](#) [Permit](#) [DMRs & Data](#) [Inspection](#) [Compliance](#) [Reference Tables](#)

Recent Activity Recent Selections/Searches

Home > Permit

Alternate Reports

Show Report List

Global Permit Tasks

Filter

Select a list to filter by

Permit Reports

- Affiliations
- CNE Applications
- Effluent Guidelines
- Incomplete Permits
- Jurisdictions
- Monitoring Point Limits
- Site Conditions BMPs
- Outfalls/Monitoring Points
- Permit Action / Milestones
- Permit Reissuance
- Permit SIC/NAICS
- Related Permits Report
- SEPA
- Sewer Overflow Events
- Submittals
- Wastewater Treatment
- Workload Planning
- WSDOT Permits

GMAP

- CSW DMR Compliance
- Construction Activity Duration by Acreage
- EPA Priority Permits

Permit Home Page

Reports | 1. Primary Report

Permit Status = Active, Draft
 Permit Status = Active

Water Quality Name	Permit Number	Permit Id	Permit Version	Permit Status	Permit Sub Status	Permit Type	Admin Region
0 Stein Road	WAR126217	870689	2	Active	Coverage Issued	Construction SW GP	Headquarters
1 Stop Self Storage	WAR305387	905044	1	Active	Coverage Issued	Construction SW GP	Headquarters
100 ACRE WOODS	WAR303829	887032	1	Active	Coverage Issued	Construction SW GP	Headquarters
120th Ave NE Stage 2	WAR302269	870272	2	Active	Coverage Issued	Construction SW GP	Headquarters
120th Avenue NE Roadway Project	WAR304269	894606	1	Active	Coverage Issued	Construction SW GP	Headquarters
122 Development	WAR305543	905263	1	Active	Coverage Issued	Construction SW GP	Headquarters
1303-WLD Duvall Village	WAR303978	890398	1	Active	Coverage Issued	Construction SW GP	Headquarters
132nd Avenue Short Plat	WAR301780	867409	2	Draft	Draft	Construction SW GP	Headquarters
1356 Axton Road	No Permit	898640	1	Draft	Draft	Non Point	Northwest



Detailed Facility Information

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State of Washington

Permitting and Reporting Information System
(PARIS)

Home Facility Permit DMRs & Data Inspection Compliance Reference Tables

Recent Activity Recent Selections/Searches Search PARIS...

Home > Permit > Permit Detail


PULLMAN WWTP - WA0044652 (Version: 5 Effective: 06/01/2014 Expiration: 05/31/2019 Status: Active) Ellie Key

Water Quality Permit WA0044652 Detail

Facility Documents Milestones Industrial Class Public Notices SEPA Inspections Submittals Outfalls
Limits DMR Data Violations Affiliations Enforcements Other Facility Details Communications

Permit Information

Water Quality Name	PULLMAN WWTP
Facility Site Name	PULLMAN CITY WWTP
Address	1025 NW GUY ST
City	Pullman
Zip Code	99163-0249
County	Whitman
Permit Status	Active
Issue Date	05/15/2014
Effective Date	06/01/2014
Expiration Date	05/31/2019
Is Major	Y
Ecology Contact	Diana Washington
Permit Author	Ellie Key
Admin Region	Eastern
Permit Type	Municipal NPDES IP
Permit Version	5
Data Admin	Shara-Li Joy
PIMS	View Facility Photos



Green circles - Active Outfalls
Red circles - Inactive Outfalls
Yellow diamonds - Facility
[Click here to view this facility in Google Maps.](#)




Compliance

- Check submittal status
- View DMRs
- Check on missing/late DMRs
- Create informal and formal enforcements



Submittal Activity



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Permitting and Reporting Information System
(PARIS)

[Home](#) [Facility](#) [Permit](#) [DMRs & Data](#) [Inspection](#) [Compliance](#) [Reference Tables](#)

Recent Activity Recent Selections/Searches

[Home](#) > [Permit](#) > [Edit Permit](#) > [Schedules](#)

PULLMAN WWTP - WA0044652 (Version: 5 Effective: 06/01/2014 Expiration: 05/31/2019 Status: Active)
Ellie Key | ▼
 Contact: Diana Washington | Data Admin: Shara-Li Joy | Add Communication

Rows 10 ▼

Hide Schedule Type Field

Yes No

Submittal Status All Submittal Statuses ▼

Permit Tasks

[Log Submittal Activity](#)
[Detailed Permit Report](#)
[Cancel](#)

Permit Data

[Schedules / Submittals](#)
[Pretreat Annual Report](#)
[Combined/Sanitary Overflow Documents](#)
[Transfer Jurisdictions](#)
[Attributes](#)
[Industrial Classes \(SIC/NAIC\)](#)
[Site Conditions BMPs](#)

Information

Click the [Create](#) button to add a new submittal for this permit.

 Click the [Edit](#) link to edit the properties of the submittal

WA0044652 Submittal Activity

		Delete	Status	Begin Date	Due Date	Received Date	Schedule Name ▼	Permit Section	Violations	Resubmittals	Documents
Edit	Add Document	Delete	Not Received		01/15/2018		Industrial User Survey	S6.E	0	0	
Edit	Add Document	Delete	Submitted		07/31/2016	07/26/2016	Infiltration And Inflow Implementation Plan	S16	0	0	Copy of Record CityofPullmanWWTP Tuesday July 26 2016.PDF SewerEvalRpt revised.pdf Cover Letter CityofPullmanWWTP Tuesday July 26 2016.PDF
Edit	Add Document	Delete	Submitted		07/01/2016	06/02/2016	Mercury Control Plan	S13	0	0	2016_06_01_Mercury_Control_Plan_Final (3).pdf Copy of Record CityofPullman Thursday June 02 2016.PDF Cover Letter CityofPullman Thursday June 02 2016.PDF
Edit	Add Document		Received		06/01/2017	08/09/2017	O&M Manual Annual Review	S5.G	1	0	
Edit	Add Document	Delete	Received		01/31/2017	01/27/2017	Plan For Maintaining Adequate Capacity (Munip)	S4.B.	0	0	
Download 1 2 3 4 5											

Query Time: 3.83 Seconds (25 Records)



DMR Status Review

PULLMAN WWTP - WA0044652 (Version: 5 Effective: 06/01/2014 Expiration: 05/31/2019 Status: Active) Ellie Key | ▼

Contact: Diana Washington | Data Admin: Shara-Li Joy | Add Communication | Clear Selection

DMR Submissions

Reports: 1. Primary Report

- Water Quality Name = 'PULLMAN WWTP'
- Current Version = 'Y'
- Permit Number = 'WA0044652'
- Begin Date within Last 2 Years
- Not Started

	Water Quality Name	Permit Id	Permit Number	Begin Date	End Date	Disturbed Acres	DMR Status	Due Date	Received	Non Report Reason	WebDMR Report	WebDMR Read Only
	PULLMAN WWTP	482955	WA0044652	10/01/2017	10/31/2017	-	Not Started	11/15/2017	-	-		View Read Only
	PULLMAN WWTP	482955	WA0044652	09/01/2017	09/30/2017	-	Submitted	10/15/2017	10/13/2017	-	View WebDMR Report	View Read Only
	PULLMAN WWTP	482955	WA0044652	08/01/2017	08/31/2017	-	Submitted	09/15/2017	09/13/2017	-	View WebDMR Report	View Read Only
	PULLMAN WWTP	482955	WA0044652	07/01/2017	07/31/2017	-	Submitted	08/15/2017	08/10/2017	-	View WebDMR Report	View Read Only
	PULLMAN WWTP	482955	WA0044652	06/01/2017	06/30/2017	-	Submitted	07/15/2017	07/13/2017	-	View WebDMR Report	View Read Only
	PULLMAN WWTP	482955	WA0044652	05/01/2017	05/31/2017	-	Submitted	06/15/2017	06/09/2017	-	View WebDMR Report	View Read Only
	PULLMAN WWTP	482955	WA0044652	04/01/2017	04/30/2017	-	Submitted	05/15/2017	05/08/2017	-	View WebDMR Report	View Read Only
	PULLMAN WWTP	482955	WA0044652	03/01/2017	03/31/2017	-	Submitted	04/15/2017	04/10/2017	-	View WebDMR Report	View Read Only
	PULLMAN WWTP	482955	WA0044652	02/01/2017	02/28/2017	-	Submitted	03/15/2017	03/09/2017	-	View WebDMR Report	View Read Only
	PULLMAN WWTP	482955	WA0044652	01/01/2017	01/31/2017	-	Submitted	02/15/2017	02/13/2017	-	View WebDMR Report	View Read Only



Enforcements

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Permitting and Reporting Information System
(PARIS)

Home Facility Permit DMRs & Data Inspection Compliance Reference Tables

Recent Activity Recent Selections/Searches Search PAI

Home > Compliance > Create Enforcement

PULLMAN WWTP - WA0044652 (Version: 5 Effective: 06/01/2014 Expiration: 05/31/2019 Status: Active)
Contact: Diana Washington | Data Admin: Shara-Li Joy | Add Communication

Compliance Search Tasks

- Create Enforcement (Quick)
- Enforcement Home

Compliance Reports

- Enforcement Actions
- Enforcement Predecessors
- Enforcement Queue
- Enforcement Responses
- Enforcement Violations
- Facility Violations
- Violations/Permit Triggers

Information

Select the Facility and Permit for the new Enforcement.

Create Enforcement

Facility: PULLMAN CITY WWTP

Permit Number: WA0044652 (Version: 5 Issued: 05/15/2014)

Enforcement Type: Choose Enforcement Action Type

Status: Choose Status...

Issued Date: 10/30/2017

Enforcement Notes

The Cancel Changes button will NOT create a new enforcement action and take you back to page were previously on.

Cancel Changes Create Enforcement (CTRL+F10)



DMR Reporting

- WQ Web DMR
 - Monitoring
 - Submittals
 - Connects with PARIS



Electronic DMR Data Submission



Welcome to the Water Quality Permitting Portal

The WQWebPortal allows you a single sign-on for all your electronic Water Quality permit actions. You can access and reference your electronic submissions at the WQWebPortal site anytime—day or night.

Entering your data electronically guarantees instant receipt of the data—no more mailing paper DMRs every month! It also reduces application approval times and improves the accuracy of the data.

Apply for:

- [Permit Coverage - Notice of Intent \(NOI\)](#)
 - Construction Stormwater General Permit
 - Industrial Stormwater General Permit
 - Sand and Gravel General Permit
 - Upland Fin-Fish Hatching and Rearing General Permit
 - Water Treatment Plant General Permit
 - Boatyard General Permit
- [Conditional No Exposure Exemption \(CNE\)](#)
 - Industrial Stormwater General Permit

Submit data for:

- [Discharge Monitoring Report \(DMR\)](#)
- [Permit Submittals \(Annual Reports, SWPPP, etc\)](#)

Ecology only:

- [Web Documents](#) - Mass permit letter processing

If you need any document from this site in a version for the visually impaired, call the Water Quality Program at 360-407-6401. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.



WQWebDMR



DMRs for Permit WA0044652

Facility/Site: PULLMAN WWTP

[DMR Search](#) [Submission History](#)

Search DMRs

Monitoring Period Start Date:

DMR Status:

Monitoring Period End Date:

DMR Type:

Search Results

Results per page

Submit	Monitoring Period	DMR Type	Due Date	DMR Status	Attachments	Violations/ Messages	Action
	10/01/2017 - 10/31/2017	Monthly	11/15/2017	Not Started	0	0	Read Only - Print View - Excel
	09/01/2017 - 09/30/2017	Monthly	10/15/2017	Submitted	0	1	Read Only - Print View - Excel
	08/01/2017 - 08/31/2017	Monthly	09/15/2017	Submitted	0	2	Read Only - Print View - Excel
	07/01/2017 - 07/31/2017	Monthly	08/15/2017	Submitted	0	3	Read Only - Print View - Excel
	06/01/2017 - 06/30/2017	Monthly	07/15/2017	Submitted	0	0	Read Only - Print View - Excel
	05/01/2017 - 05/31/2017	Monthly	06/15/2017	Submitted	0	1	Read Only - Print View - Excel



DMR Example

Permit Number: WA0044652

Permittee: PULLMAN WWTP

Outfall: 001 - PALOUSE R. S.F.

Monitoring Period: 9/1/2017 - 9/30/2017

Facility County: Whitman

Received Date: 10/13/2017

DMR Reporting Codes:

[Add Overall Comments](#) |
 [Go to Summary Data](#) |
 [Show Details](#) |
 [View Paper DMR](#)

You can add a comment in any of the comment boxes on the DMR form without adding a reporting code. Only use 'Other violation' on a parameter if you do not enter a value. If you add a code such as 'Other violation' you may be creating false violations. View Reporting Codes You must enter a value or non-report reason for each parameter at the permit specified frequency unless you entered a non-report reason for the whole DMR or a monitoring point. See examples of filled out DMRs

IN1 - WASTEWATER INFLUENT																
Monitoring Point	Flow	pH	Total BOD5	BOD5 Calculated	Solids (Residue)	Solids (Residue)	Arsenic	Cadmium	Copper	Chromium	Lead	Mercury	Nickel	Silver	Zinc	
Fraction			Total	Calculated	Total suspended (TSS)	Total suspended (TSS)	Total	Total	Total	Total	Total	Total	Total	Total	Total	
Units	Million Gallons/Day	Standard Units	Milligrams/L (mg/L)	Lbs/Day	Milligrams/L (mg/L)	Lbs/Day	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	
Sample Frequency	Continuous	5/Week	2/Week	2/Week	2/Week	2/Week	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	
Week 1	9/1/2017	2.884	8.1	353.5	8502.58	254	6109.35				9/1/2017				9/1/2017	
	9/2/2017	2.724	8.09													
Week 2	9/3/2017	2.74	8.03				9/3/2017				9/3/2017				9/3/2017	
	9/4/2017	2.658	7.76													
	9/5/2017	2.982	7.88	278.6	6928.749	206	5123.195									
	9/6/2017	2.851	8.08	302.5	7192.646	215	5112.128									
	9/7/2017	2.861	8.08	257.8	6151.299	209	4986.895	1	0.124	44.4	1.53	1.57	0.0666	2.48	0.427	130
	9/8/2017	2.922	7.99	290	7067.149	214	5215.069									
9/9/2017	2.806	7.97														

Parameter	Flow	pH	Total BOD5	BOD5 Calculated	Solids (Residue)	Solids (Residue)	Arsenic	Cadmium	Copper	Chromium	Lead	Mercury	Nickel	Silver	Zinc
Fraction			Total	Calculated	Total suspended (TSS)	Total suspended (TSS)	Total	Total	Total	Total	Total	Total	Total	Total	Total
Units	Million Gallons/Day	Standard Units	Milligrams/L (mg/L)	Lbs/Day	Milligrams/L (mg/L)	Lbs/Day	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)	Micrograms/L (ug/L)
Sample Frequency	Continuous	5/Week	2/Week	2/Week	2/Week	2/Week	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Minimum		7.69			Minimum					Minimum					Minimum
Average Monthly	2.8596		294.5823	7109.041	233.35	5646.242				Average Monthly					Average Monthly
	Design Limit: 4.3		Report Only	Design Limit: 8080	Report Only	Design Limit: 9420									
Weekly Average					Weekly Average					Weekly Average					Weekly Average
Maximum	3.023	8.18	353.5	8502.58	282	6691.099	1	0.124	44.4	1.53	1.57	0.0666	2.48	0.427	130
	Design Limit: 5.2	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only	Report Only





Plans for the Future

Identified Needs

- Limit Development Spreadsheet for Intermittent/Episodic Discharges
- Tool for Nutrient WQBELs
- Electronic NPDES 'Smart' Application





Questions and Discussion