Official Draft Public Notice Version **October 26, 2020**
The findings, determinations, and assertions contained in this document are not final and subject to change following the public comment period.

FACT SHEET AND STATEMENT OF BASIS
FLOWSERVE, INC.
RENEWAL PERMIT: DISCHARGE
UPDES PERMIT NUMBER: UT0024422
MINORINDUSTRIAL

FACILITY CONTACTS

Person Name:	Wayne Naumann	**Person Name:**	Brian Pike
Position:	Director & General Manager	**Position:**	HSE Manager
Phone Number:	801.489.2452	**Phone Number:**	801.489.8611
Email:	wnaumann@flowserve.com	**Email:**	bpike@flowserve.com
Person Name:	Larry Kittel	**Person Name:**	Clint Proctor
Position:	EHS Coordinator	**Position:**	Production Manager
Phone Number:	801.404.6287	**Phone Number:**	801.489.8611
Email:	lkittell@flowserve.com	**Email:**	cproctor@flowserve.com

Facility Name: Flowserve, Inc.
Mailing and Facility Address: 1350 North Mountain Springs Parkway
Springville, Utah 84663
Telephone: 801.489.2452

DESCRIPTION OF FACILITY

Flowserve, Inc. (Flowserve) engineers, manufactures, and tests control valves and components. Its Standard Industrial Classification (SIC) code is 3491, Industrial Valves. Three wastewater streams are produced on site: 1) sanitary waste, 2) metal finishing wastewater (including anodizing and phosphating wastewater), and 3) valve testing water. Sanitary and metal finishing wastewaters are discharged to the Springville City Wastewater Treatment Plant (SCWWTP). Valve test water is discharged to a reflecting pond northwest of the facility and ultimately to Spring Creek.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

Flowserve has not made any improvements at the facility to change the water discharge quality.

The facility contact list was updated. In a letter dated June 30, 2020 (DWQ-2015-007609) Flowserve indicated their annual average phosphorus concentrations of the effluent are expected to be below the 1 mg/L TBPEL requirement, therefore the facility is currently in compliance with the TBPEL Rule. A letter of acceptance was not located in the file but previous FSSOB (DWQ-2015-013245) indicates the request was accepted and therefore, Flowserve is exempted from meeting the TBPEL and monitoring requirements. This is believed to be the same case because the pollutant of concern at Flowserve is Oil & Grease.

Annual metal sampling has been added for reasonable potential analysis (RP).

DISCHARGE

DESCRIPTION OF DISCHARGE

Flowserve uses culinary water to perform hydrostatic tests, when required, on its finished valves. The

valves are cleaned prior to testing. Depending on valve size, flow rates range from 0 to 4,000 gallons per minute with each test lasting between 2 and 12 minutes depending on the testing requirements. Testing is performed in three different locations in the hydrostatic testing lab. Flows from these areas combine in the collection tank and drain through a 12-inch diameter pipe to a manhole in the northwest corner of the building. The manhole discharges to a reflecting pond that also receives effluent from the SCWWTP and a portion of the water from Hobble Creek. The water from the reflecting pond flows to an unnamed ditch and ultimately to Spring Creek.

Outfall	Description of Discharge Point
001	Located at latitude 40°11'11" North and longitude 111°37'44" West. The discharge is through a 12-inch diameter pipe from the hydrostatic testing collection tank to a manhole in the northwest corner of the building. It then flows to a reflecting pond then to an unnamed ditch and ultimately to Spring Creek.

RECEIVING WATERS AND STREAM CLASSIFICATION

The discharge from Flowserve flows to a reflecting pond and then into an unnamed ditch and ultimately to Spring Creek. According to *Utah Administrative Code (UAC) R317-2-13* Spring Creek designated uses are Class 2B, 3D and 4:

Class	Description
Class 2B	Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
Class 3D	Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.
Class 4	Protected for agricultural uses including irrigation of crops and stock watering.

BASIS FOR EFFLUENT LIMITATIONS

Limitations on pH are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. The oil and grease is based on best professional judgment (BPJ). Attached is the Wasteload Analysis and Antidegradation Level I Review for this discharge into the pond, unnamed irrigation ditch and ultimately Spring Creek. It has been determined that this discharge will not cause a violation of water quality standards. An Antidegradation Level II review is not required since the Level I review shows that water quality impacts are minimal. The permittee is expected to be able to comply with these limitations.

Parameters of Concern

Due to the nature of the discharge (flow-through culinary water for valve testing) the discharge was determined to have negligible potential to add pollutants to the receiving water with the possible exception of oil and grease. No additional parameters of concern were identified.

TMDL

Spring Creek is listed as impaired for total ammonia and temperature in Utah's 2016 303(d) list.

Utah Lake is listed for harmful algal blooms, total dissolved solids, total phosphorus and PCBs in fish tissue and Provo Bay is listed for pH, total ammonia, total phosphorus and PCBs in fish tissue on the

2016 303(d) list of impaired waterbodies. The Utah Lake Water Quality Study is ongoing with the objective to develop numeric nutrient criteria for Utah Lake and Provo Bay.

The receiving waters do not have approved TMDLs for any of these constituents.

Reasonable Potential Analysis
Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. To complete a RP analysis, more than 10 data points per parameter are needed. Flowserve was not required to sample for metal parameters in their previous permit, therefore, analysis data is not available to perform a RP analysis. For this permit cycle, Flowserve will be required to permit, at a minimum, annual metal sampling. If additional sampling is performed, it shall be reported to DWQ. Less than 10 data points may affect the RP outcomes which may require additional monitoring in the future.

Table 1				
Parameter	**Effluent Limitations**			
	Maximum Monthly Avg	**Maximum Weekly Avg**	**Daily Minimum**	**Daily Maximum**
pH, Standard Units	--	--	6.5	9
Oil & Grease, mg/L	--	--	--	10.0

SELF-MONITORING AND REPORTING REQUIREMENTS
The permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) in NetDMR unless the permittee has successfully petitioned for an exception. Lab sheets for metals must be attached to the DMRs.

Table 2			
Self-Monitoring and Reporting Requirements [a, b]			
Parameter	**Frequency**	**Sample Type**	**Units**
Total Flow [c, d]			
Effluent	Monthly	Estimated	MGD
pH			
Effluent	Monthly	Grab	SU
Oil & Grease [e]			
Effluent	Monthly	Grab	mg/L
Metals [f, g, h]			
Effluent	Annually	Composite	mg/L

Table References

a. See Definitions, ***Part VIII***, for definition of terms.

b. All parameters in this table will be reported on the monthly Discharge Monitoring Report.

c. Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

d. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

e. There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

f. Metals samples should be analyzed using a method that meets MDL requirements. If a test method is not available the permittee must submit documentation to the Director regarding the method that will be used. The sample type (composite or grab) should be performed according to the methods requirements.

g. Metals are being sampled in support of the work being done for the Reasonable Potential Analysis. The Metal parameters will be monitored and reported on an annual basis by the facility on Discharge Monitoring Report, but will not have a limit associated with them, if Morgan City decides to sample more frequently for these parameters, the additional data will be welcome.

h. Metals

Arsenic
Cadmium
Total Chromium
Copper
Cyanide
Lead
Mercury
Nickel
Selenium
Silver
Zinc

End Table References

BIOSOLIDS

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, this facility is an industrial facility where all sanitary waste is sent to a local sanitary sewer system for treatment, and thus does not generate any biosolids on site. As a result, no biosolids requirements are included.

STORM WATER

Separate storm water permits may be required based on the types of activities occurring on site.

Permit coverage under the Multi Sector General Permit (MSGP) for Storm Water Discharges from Industrial Activities is required based on the Standard Industrial Classification (SIC) code for the facility and the types of industrial activities occurring. If the facility is not already covered, it has 30 days from when this permit is issued to submit the appropriate Notice of Intent (NOI) for the MSGP or exclusion documentation. Previously storm water discharge requirements and coverage were combined in this individual permit. These have been separated to provide consistency among permittees, electronic reporting for storm water discharge monitoring reports, and increase flexibility to changing site conditions.

Permit coverage under the Construction General Storm Water Permit (CGP) is required for any construction at the facility which disturb an acre or more, or is part of a common plan of development or sale that is an acre or greater. A Notice of Intent (NOI) is required to obtain a construction storm water permit prior to the period of construction.

Information on storm water permit requirements can be found at http://stormwater.utah.gov

PRETREATMENT REQUIREMENTS

Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of the CWA, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at 40 CFR Part 403, the State Pretreatment Requirements at UAC R317-8-8, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters.

In addition, in accordance with 40 CFR Part 403.12(p)(1), the Flowserve must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under 40 CFR Part 261. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).

BIOMONITORING REQUIREMENTS

A nationwide effort to control toxic discharges where effluent toxicity is an existing or potential concern is regulated in accordance with the Utah Pollutant Discharge Elimination System Permit and Enforcement Guidance Document for Whole Effluent Toxicity Control (biomonitoring), dated February 2018. Authority to require effluent biomonitoring is provided in Permit Conditions, UAC R317-8-4.2, Permit Provisions, UAC R317-8-5.3 and Water Quality Standards, UAC R317-2-5 and R317 -2-7.2.

The permittee is a minor industrial facility that will be discharging an infrequent amount of effluent, in

which toxicity is neither an existing concern, nor likely to be present. Also, the receiving irrigation ditch is regularly dry; therefore there is not any available data to conclude that the irrigation ditch is impaired. Based on these considerations and the absence of receiving stream water quality monitoring data, there is no reasonable potential for toxicity in the permittee's discharge (per State of Utah Permitting and Enforcement Guidance Document for WET Control). As such, there will be no numerical WET limitations or WET monitoring requirements in this permit. However, the permit will contain a toxicity limitation re-opener provision that allows for modification of the permit should additional information indicate the presence of toxicity in the discharge.

PERMIT DURATION

It is recommended that this permit be effective for a duration of five (5) years.

Drafted by
Sarah Leavitt Ward, Discharge
Jennifer Robinson, Pretreatment
Lonnie Shull, Biomonitoring
Lisa Stevens, Storm Water
Suzan Tahir, Wasteload Analysis
Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE

Began: Month Day, Year
Ended: Month Day, Year

Comments will be received at: 195 North 1950 West
PO Box 144870
Salt Lake City, UT 84114-4870

The Public Noticed of the draft permit was published on the Department of Environmental Quality Division of Water Quality Public Notice website.

During the public comment period provided under R317-8-6.5, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and shall be answered as provided in R317-8-6.12.

ADDENDUM TO FSSOB

During finalization of the Permit certain dates, spelling edits and minor language corrections were completed. Due to the nature of these changes they were not considered Major and the permit is not required to be re Public Noticed.

Responsiveness Summary

(Explain any comments received and response sent. Actual letters can be referenced, but not required to be included).

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ATTACHMENT 1

Industrial Waste Survey

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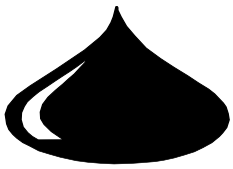
Industrial Pretreatment Wastewater Survey



Do you periodically experience any of the following treatment works problems:

foam, floaties or unusual colors
plugged collection lines caused by grease, sand, flour, etc.
discharging excessive suspended solids, even in the winter
smells unusually bad
waste treatment facility doesn't seem to be treating the waste right

Perhaps the solution to a problem like one of these may lie in investigating the types and amounts of wastewater entering the sewer system from industrial users.

An industrial user (IU) is defined as a non-domestic user discharging to the waste treatment facility which meets any of the following criteria:

1. **has a lot of process wastewater (5% of the flow at the waste treatment facility or more than 25,000 gallons per work day.)**

   Examples: Food processor, dairy, slaughterhouse, industrial laundry.

2. **is subject to Federal Categorical Pretreatment Standards**;

   Examples: metal plating, cleaning or coating of metals, blueing of metals, aluminum extruding, circuit board manufacturing, tanning animal skins, pesticide formulating or packaging, and pharmaceutical manufacturing or packaging,

3. **is a concern to the POTW.**

   Examples: septage hauler, restaurant and food service, car wash, hospital, photo lab, carpet cleaner, commercial laundry.

All users of the water treatment facility are **prohibited** from making the following types of discharges:

1. A discharge which creates a fire or explosion hazard in the collection system.

2. A discharge which creates toxic gases, vapor or fumes in the collection system.

3. A discharge of solids or thick liquids which creates flow obstructions in the collection system.

4. An acidic discharge (low pH) which causes corrosive damage to the collection system.

5. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause problems in the collection system or at the waste treatment facility.

6. Waste haulers are prohibited from discharging without permission. (No midnight dumping!)

When the solution to a sewer system problem may be found by investigating the types and amounts of wastewater entering the sewer system discharged from IUs, it's appropriate to conduct an Industrial Waste Survey.

An Industrial Waste Survey consists of:

Step 1: Identify Industrial Users

Make a list of all the commercial and industrial sewer connections.

Sources for the list:

business license, building permits, water and wastewater billing, Chamber of Commerce, newspaper, telephone book, yellow pages.

Split the list into two groups:

domestic wastewater only--no further information needed
everyone else (IUs)

Step 2: Preliminary Inspection

Go visit each IU identified on the "everybody else" list.

Fill out the **Preliminary Inspection Form** during the site visit.

Step 3: Informing the State

Please fax or send a copy of the Preliminary inspection form (both sides) to:

Jennifer Robinson

Division of Water Quality
288 North 1460 West
PO Box 144870
Salt Lake City, UT 84114-4870

Phone: (801) 536-4383
Fax: (801) 536-4301
E-mail: jenrobinson@utah.gov

PRELIMINARY INSPECTION FORM

INSPECTION DATE ___ / ____ /

Name of Business **Person Contacted** _____
Address _____ **Phone Number** _____

_____

Description of Business _____

Principal product or service: _____

Raw Materials used: _____

_____

Production process is: [ ] Batch [ ] Continuous [ ] Both

Is production subject to seasonal variation? [ ] yes [ ] no
If yes, briefly describe seasonal production cycle.

_____

This facility generates the following types of wastes (check all that apply):

1. [ ] Domestic wastes (Restrooms, employee showers, etc.)
2. [ ] Cooling water, non-contact
3. [ ] Boiler/Tower blowdown
4. [ ] Cooling water, contact
5. [ ] Process
6. [ ] Equipment/Facility washdown
7. [ ] Air Pollution Control Unit
8. [ ] Storm water runoff to sewer
9. [ ] Other describe

Wastes are discharged to (check all that apply):

[ ] Sanitary sewer **[ ] Storm sewer**
[ ] Surface water **[ ] Ground water**
[ ] Waste haulers **[ ] Evaporation**
[ ] Other (describe)
Name of waste hauler(s), if used

_____

Is a grease trap installed? Yes No
Is it operational? Yes No

Does the business discharge a lot of process wastewater?

- **More than 5% of the flow to the waste treatment facility? Yes No**
- **More than 25,000 gallons per work day? Yes No**

Does the business do any of the following:

[ ] Adhesives
[ ] Aluminum Forming
[ ] Battery Manufacturing
[ ] Copper Forming
[ ] Electric & Electronic Components
[ ] Explosives Manufacturing
[ ] Foundries
[ ] Inorganic Chemicals Mfg. or Packaging
[ ] Industrial Porcelain Ceramic Manufacturing
[ ] Iron & Steel
[ ] Metal Finishing, Coating or Cleaning
[ ] Mining
[ ] Nonferrous Metals Manufacturing
[ ] Organic Chemicals Manufacturing or Packaging
[ ] Paint & Ink Manufacturing
[ ] Pesticides Formulating or Packaging
[ ] Petroleum Refining
[ ] Pharmaceuticals Manufacturing or Packaging
[ ] Plastics Manufacturing
[ ] Rubber Manufacturing
[ ] Soaps & Detergents Manufacturing
[ ] Steam Electric Generation
[ ] Tanning Animal Skins
[ ] Textile Mills

[ ] Car Wash
[ ] Carpet Cleaner
[ ] Dairy
[ ] Food Processor
[ ] Hospital
[ ] Laundries
[ ] Photo Lab
[ ] Restaurant & Food Service
[ ] Septage Hauler
[ ] Slaughter House

Are any process changes or expansions planned during the next three years? Yes No
If yes, attach a separate sheet to this form describing the nature of planned changes or expansions.

_____
Inspector

_____
Waste Treatment Facility

Please send a copy of the preliminary inspection form (both sides) to:

Jennifer Robinson
Division of Water Quality
PO Box 144870
Salt Lake City, Utah 84114-4870

Phone: **(801) 536-4383**
Fax: **(801) 536-4301**
E-Mail: **jenrobinson@utah.gov**

	Industrial User	Jurisdiction	SIC Codes	Categorical Standard Number	Total Average Process Flow (gpd)	Total Average Facility Flow (gpd)	Facility Description
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

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ATTACHMENT 2

Effluent Monitoring Data

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Flowserve, Inc

UT0024422

Effluent Monitoring Data					
Month	Year	pH, SU	Oil & Grease	Flow Max	Flow Ave
January	2016	7.4	ND	20379	1018.95
February	2016	7.3	ND	17405	870.25
March	2016	7.6	ND	37012	1682.36
April	2016	7.8	ND	17729	844.24
May	2016	7.6	ND	13998	66.57
June	2016	7.7	ND	38683	1758.32
July	2016	7.5	ND	477063	25108.58
August	2016	7.7	ND	219346	9635.78
September	2016	7.3	ND	79027	3763.19
October	2016	7.6	ND	37449	1783.29
November	2016	7.6	ND	85733	4286.65
December	2016	7.8	ND	100328	5016.4
January	2017	7.5	ND	124552	5931.05
February	2017	7.7	ND	23173	1219.63
March	2017	7.7	ND	547605	23808.91
April	2017	7.6	ND	19768	1040.42
May	2017	7.6	ND	0	0
June	2017	7.7	ND	292635	13301.59
July	2017	8	ND	712	37.47
August	2017	7.7	ND	0	0
September	2017	8.1	ND	80217	4010.85
October	2017	7.7	ND	198893	9040.59
November	2017	7.7	ND	0	0
December	2017	7.6	ND	77504	3690.67
January	2018	8	ND	12221	581.95
February	2018	8	ND	535	28.16
March	2018	8	ND	110042	4784.43
April	2018	7.6	ND	0	0
May	2018	7.7	ND	232493	10567.86
June	2018	8	ND	354478	16112.64
July	2018	7.6	ND	7317	385.11
August	2018	7.6	ND	75379	3277.35
September	2018	7.6	ND	4101	205.05
October	2018	7.6	ND	3434	156.09
November	2018	7.5	ND	4048	202.4
December	2018	7.6	ND	301870	15887.89
January	2019	7.4	ND	20379	1018.95
February	2019	7.3	ND	17405	870.25

Flowserve, Inc
UT0024422

Effluent Monitoring Data *continued*					
Month	Year	pH, SU	Oil & Grease	Flow Max	Flow Ave
March	2019	7.6	ND	37012	1682.36
April	2019	7.8	ND	17729	844.24
May	2019	7.6	ND	13998	666.57
June	2019	7.7	ND	38683	1758.32
July	2019	7.5	ND	477063	25108.58
August	2019	7.7	ND	219346	9536.78
September	2019	7.3	ND	79027	3763.19
October	2019	7.6	ND	37449	1783.29
November	2019	7.6	ND	85733	4286.65
December	2019	7.6	ND	22224	1111.2
January	2020	7.9	ND	49308	49308
February	2020	7.8	ND	3532	3532
March	2020	7.7	ND	5233	5233
April	2020	7.6	ND	43	43
May	2020	7.6	ND	39514	39514

ATTACHMENT 3

Wasteload Analysis

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ATTACHMENT 4

Reasonable Potential Analysis

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REASONABLE POTENTIAL ANALYSIS

Water Quality has worked to improve our reasonable potential analysis (RP) for the inclusion of limits for parameters in the permit by using an EPA provided model. As a result of the model, more parameters may be included in the renewal permit. A Copy of the Reasonable Potential Analysis Guidance (RP Guide) is available at water Quality. There are four outcomes for the RP Analysis[1]. They are;

Outcome A:	A new effluent limitation will be placed in the permit.
Outcome B:	No new effluent limitation. Routine monitoring requirements will be placed or increased from what they are in the permit,
Outcome C:	No new effluent limitation. Routine monitoring requirements maintained as they are in the permit,
Outcome D:	No limitation or routine monitoring requirements are in the permit.

Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. In order to complete a RP analysis, more than 10 data points per parameter are needed. Morgan was not required to sample for metal parameters in their previous permit, therefore, analysis data is not available to perform a RP analysis. For this permit cycle, Morgan will be required to permit, at a minimum, annual metal sampling. If additional sampling is performed, it shall be reported to DWQ. Less than 10 data points may affect the RP outcomes which may require additional monitoring in the future.

[1] See Reasonable Potential Analysis Guidance for definitions of terms