Official Draft Public Notice Version **March 19th, 2026**
The findings, determinations, and assertions contained in this document are not final and subject to change following the public comment period.

FACT SHEET
FRESENIUS MEDICAL CARE OGDEN FACILITY
RENEWAL PERMIT: DISCHARGE
UPDES PERMIT NUMBER: UT0023752
MINOR INDUSTRIAL

FACILITY CONTACTS

Person Name:	Brett Barton
Position:	Plant Manager

Person Name:	Jennifer Johnson
Position:	EHS Associate Specialist
Phone Number:	(801) 866-1642

Permittee Name:	Fresenius Medical Care
Facility Name:	Fresenius Medical Care Ogden Facility
Mailing and Facility Address:	475 West 13th Street Ogden, Utah 84404
Telephone:	(801) 866-1642
Actual Address:	475 West 13th Street

DESCRIPTION OF FACILITY

Fresenius Medical Care Ogden Facility (Facility) formulates, packages, and manufactures products used in different applications for the treatment of renal disease (kidney failure). One product is dialysate solution and is used in the treatment of peritoneal dialysis. The other product is a dialyzer (a special filter) used in hemodialysis treatment. Both products and treatments replace the work of the kidneys. The Facility was remodeled in 2006 to its current standards. The Facility has a Standard Industrial Classification (SIC) code of 3841 for Surgical and Medical Instruments and 2834 for Pharmaceutical Preparations. The Facility's discharge is located at latitude 41° 14' 32" and longitude 111° 59' 22", in Weber County, Utah. It has STORET number 492306 and one discharge point, Outfall 001.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

There are no changes in this Permit renewal. There have also been no changes to operation.

DISCHARGE

DESCRIPTION OF DISCHARGE

All water discharged by the Facility is derived from the Ogden City culinary water system and/or stormwater runoff. Approximately 21,500 gallons per day (gpd) of non-contact cooling water from the production heat exchanger and stormwater runoff from throughout the site are discharged at the beginning of the stormwater detention basin. If the basin discharges, it does so via the Plain City Canal, which flows into Mill Creek. Due to the addition of stormwater discharging through Outfall 001, the Facility does not sample during storm events greater than 0.10 tenths of an inch or 24 hours thereafter, when flows greater than 21,500 gpd may be present. Outfall 002 is at the end of the stormwater detention pond and is comprised of only stormwater and therefore not covered under this Permit. As a result, a discharge flow rate of 70,000 gpd was used for the development of the effluent limits. Five years of self-monitoring show that the Facility has not had any violations during the previous Permit cycle.

All sanitary waste, recycled cooling tower water from the boilers, and wastewater from Micro Lab are discharged to the Central Weber Sewer Improvement District's sanitary sewer.

Outfall	Description of Discharge Point
001	Located at latitude 41º 14' 32" and longitude 111º 59' 22". The discharge flows into the retention basin, then to the Plain City Canal, then to Mill Creek, which is a tributary of the Weber River and hence to the Great Salt Lake. STORET discharge location is 492306.

RECEIVING WATERS AND STREAM CLASSIFICATION

The receiving water for Outfall 001 is a concrete storm drain that conveys water to the Plain City Canal, into Mill Creek, into the Weber River, and into the Great Salt Lake.

Per Utah Administrative Code (UAC) R317-2-13.13, the designated beneficial uses of the affected assessment units in the immediate area are all waters not specifically classified and are presumptively classified with Uses 2B, 3D.

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.

Per UAC R317-2-13.13.4(a), the designated beneficial uses of the downstream assessment units are Weber River, from Great Salt Lake to Slaterville diversion, except as listed below with uses 2B, 3C, 3D, 4.

Class 3C -- Protected for nongame fish and other aquatic life, including the necessary aquatic organisms in their food chain.

Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.

However, the Plain City Canal may be designated as a tributary to Mill Creek (a stream not specifically classified), an agricultural irrigation canal, or a drainage canal. The Utah Division of Water Quality (DWQ) believes that the Ogden Nature Center has modified the Plain City Canal into an irrigation canal. Therefore,

the designated beneficial uses for the Plain City Canal are per UAC R317-2-13.13.9 All irrigation canals and ditches statewide, except as otherwise designated uses 2B, 3E, 4.

Class 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

Per UAC R317-2-8 Protection of Downstream Uses, all actions to control waste discharges under these rules shall be modified as necessary to protect downstream designated uses.

TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

According to the Utah's Final 2024 Integrated Report on Water Quality dated April 30, 2024 (UDWQ, 2024), the receiving water for Outfalls 001 and 002 discharge "*Weber River, from Great Salt Lake to Slaterville diversion, except as listed below* (AU name: *Weber River-1,* AU ID: *UT16020102-001_00*)" was listed as "Not Supporting" for Benthic Macroinvertebrates Bioassessment. The receiving waters do not have an approved TMDL for any parameters.

Attached is a Wasteload Analysis (WLA) for this discharge into Mill Creek. It has been determined that this discharge will not cause a violation of water quality standards.

BASIS FOR EFFLUENT LIMITATIONS

In accordance with regulations promulgated in 40 Code of Federal Regulations Part 122.44 and UAC R317-8-4.2, effluent limitations are derived from technology-based effluent limitations guidelines, Utah Secondary Treatment Standards (UAC R317-1-3.2) or Utah Water Quality Standards (UAC R317-2) as applicable. In cases where multiple limits have been developed, those that are more stringent apply. In cases where no limits or multiple limits have been developed, Best Professional Judgment (BPJ) of the Permitting authority may be used where applicable. Best Professional Judgment, or BPJ, refers to a discretionary, best professional decision made by the Permit writer based upon precedent, prevailing regulatory standards, or other relevant information.

Permit limits can also be derived from the WLA, which incorporates Secondary Treatment Standards, Water Quality Standards, including any applicable TMDL impairments as appropriate, Antidegradation Reviews (ADR), and designated uses into a water quality model that projects the effects of discharge concentrations on receiving water quality. Effluent limitations are those that the model demonstrates are sufficient to meet State water quality standards in the receiving waters. During this UPDES renewal Permit development, a WLA and ADR were completed as appropriate and determined that this discharge will not cause a violation of water quality standards. An ADR Level I review was performed and concluded that an ADR Level II review was not required at this time since water quality will not be further lowered by the proposed activity, as per UAC R317-2-3.5.b.1.(b). The WLA indicates that the effluent limitations will be sufficiently protective of water quality, in order to meet State water quality standards in the receiving waters. The WLA with ADR information is attached to this Fact Sheet.

Limitations for pH are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. Oil and grease limitations is based on BPJ. Limitations for total dissolved solids (TDS) are derived from the WLA. Limitations for biochemical oxygen demand (BOD_5) and total suspended solids (TSS) have been carried over from the previous Permit pursuant to UAC R317-8-4.2(11). The Permittee is expected to be able to comply with these limitations.

Reasonable Potential Analysis

Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. RP for this Permit renewal was conducted following DWQ's

September 10, 2015, Reasonable Potential Analysis Guidance (RP Guidance). The RP for this Permit renewal was not conducted due to insufficient discharge data.

The Permit limitations are:

Parameter	Table 1: Effluent Limitations[a]				
	Maximum Monthly Avg	Maximum Weekly Avg	Yearly Average	Daily Minimum	Daily Maximum
Biochemical Oxygen Demand (BOD_5), mg/L	25	35	--	--	--
Total Suspended Solids (TSS), mg/L	25	35	--	--	--
Oil & Grease, mg/L	--	--	--	--	10.0
pH, Standard Units	--	--	--	6.5	9
Total Dissolved Solids (TDS), mg/L	--	--	--	--	1,200

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are the same as in the previous Permit. The Permit requires reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) forms due 28 days after the end of the monitoring period. Effective January 1, 2017, monitoring results shall be submitted using NetDMR unless the Permittee has successfully petitioned for an exception. Lab sheets for biomonitoring, metals and toxic organics shall be attached to the DMRs.

Table 2: Self-Monitoring and Reporting Requirements[a]			
Parameter	Frequency	Sample Type	Units
Total Flow[b][c]	Quarterly	Estimate	MGD
BOD_5	Quarterly	Grab	mg/L
TSS	Quarterly	Grab	mg/L
pH	Quarterly	Grab	SU
Oil & Grease[d]	Quarterly / When Sheen Observed	Grab	mg/L
TDS	Quarterly	Grab	mg/L

Notes Tables 1 and 2

a. See Definitions, *Part VIII*, for definition of terms.
b. Flow measurements of influent/effluent volume shall be made in such a manner that the Permittee can affirmatively demonstrate that representative values are being obtained.
c. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
d. Oil & Grease shall be when sheen is present or visible. If no sheen is present or visible, report NA.

All Permit compliance monitoring will occur at the Outfall location listed in the DESCRIPTION OF DISCHARGE Section above.

BIOSOLIDS

The State of Utah has adopted the 40 C.F.R. § 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, this facility does not receive, generate, treat or dispose of biosolids. Therefore 40 C.F.R. § 503 shall not apply.

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 may be 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.

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 wastewater discharged to the sanitary sewer, either as a direct discharge or as hauled waste, is subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of the CWA, the Permittee shall comply with all applicable Federal 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 wastewaters.

In addition, in accordance with 40 CFR Part 403.12(p)(1), the Permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if the Permittee discharges 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 discharge a relatively small volume of effluent to the receiving water, in which toxicity is neither an existing concern, nor likely to be present. Based on these considerations, 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 and Reviewed by
Lindsay Cowles, Discharge Permit Writer
Daniel Griffin, Biosolids
Jennifer Robinson, Pretreatment
Lonnie Shull, Biomonitoring
Jordan Bryant, Storm Water
Christine Osborne, TMDL/Watershed Protection
Christopher Shope, PhD, Wasteload Analysis/ADR
Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE INFORMATION (to be updated after)

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 Notice of the draft Permit was published on State of Utah and/or DWQ's website for at least 30 days as required.

During the public notice and comment period provided under UAC 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 UAC R317-8-6.12.

ADDENDUM TO FACT SHEET

During finalization of the Permit certain dates, spelling edits and minor language corrections were completed. Due to the nature of these changes, they are considered minor changes and the Permit is not required to be re Public Noticed as provided in UAC R317-8-5.6(3)

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

Effluent Monitoring Data

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Effluent Monitoring Data.

Parameter		BOD Maximum Monthly Average (mg/L)	BOD Maximum Weekly Average (mg/L)	TSS Maximum Monthly Average (mg/L)	TSS Maximum Weekly Average (mg/L)	pH Daily Minimum (SU)	pH Daily Maximum (SU)	TDS (mg/L)	Oil & Grease (mg/L)
Monitoring Period	3/31/2021	13	13	ND	ND	7.81	7.81	328	ND
	6/30/2021	17	17	ND	ND	7.87	7.87	284	ND
	9/30/2021	5	5	ND	ND	7.86	7.86	348	ND
	12/31/2021	7	7	ND	ND	7.67	7.67	264	ND
	3/31/2022	5	5	ND	ND	7.94	7.94	272	ND
	6/30/2022	ND	ND	ND	ND	7.71	7.71	308	ND
	9/30/2022	ND	ND	6	6	7.84	7.84	220	ND
	12/31/2022	23	23	ND	ND	7.88	7.88	320	ND
	3/31/2023	5	5	ND	ND	7.88	7.88	260	ND
	6/30/2023	ND	ND	ND	ND	7.98	7.98	148	ND
	9/30/2023	ND	ND	ND	ND	8.13	8.13	244	9
	12/31/2023	ND	ND	ND	ND	7.86	7.86	280	ND
	3/31/2024	ND	ND	ND	ND	8.12	8.12	284	ND
	6/30/2024	ND	ND	ND	ND	7.97	7.97	96	ND
	9/30/2024	ND	ND	ND	ND	7.91	7.91	220	ND
	12/31/2024	ND	ND	ND	ND	7.91	7.91	236	ND
	3/31/2025	ND	ND	ND	ND	7.89	7.89	116	ND
	6/30/2025	ND	ND	ND	ND	7.96	7.96	156	ND
	9/30/2025	ND	ND	ND	ND	7.96	7.96	168	ND

ATTACHMENT 2

Wasteload Analysis

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State of Utah
SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Tim Davis
Executive Director

DIVISION OF WATER QUALITY
Candice Hasenyager, P.E.
Director

Utah Division of Water Quality
Statement of Basis ADDENDUM
Wasteload Analysis and Antidegradation Level I Review

Date: **January 24, 2026**

Prepared by: **Christopher L. Shope, PhD**
Standards and Technical Services

Facility: **Fresenius Medical Care**
UPDES Permit No. Preliminary - UT0023752

This addendum summarizes the wasteload analysis that was performed to determine water quality based effluent limits (WQBEL) for this discharge. Wasteload analyses are performed to determine point source effluent limitations necessary to maintain designated beneficial uses by evaluating projected effects of discharge concentrations on in-stream water quality. The wasteload analysis also takes into account downstream designated uses (UAC R317-2-8). Projected concentrations are compared to numeric water quality standards to determine acceptability. The numeric criteria in this wasteload analysis may be modified by narrative criteria and other conditions determined by staff of the Division of Water Quality.

DISCHARGE

Outfall 001has a design flow rate of 0.0215 MGD, consisting of non-contact cooling water and stormwater. Outfall 001 enters the stormwater infiltration pond. Excess storage from the stormwater infiltration pond exits the pond at Outfall 002, with a design flow rate of 0.0485 MGD and includes stormwater and flow from Outfall 001. The point of compliance remains Outfall 001.

Expected combined effluent discharge remains at 0.07 MGD.

RECEIVING WATER

The receiving water for Outfalls 001 and 002 is a concrete storm drain that conveys water to the Plain City Canal, into Mill Creek, into the Weber River, and into Great Salt Lake

Per UAC R317-2-13.13, the designated beneficial uses of the affected assessment units in the immediate area are *all waters not specifically classified are presumptively classified* with Uses *2B, 3D*.

- *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.*

Per UAC R317-2-13.13.4a, the designated beneficial uses of the downstream assessment units is *Weber River, from Great Salt Lake to Slaterville diversion, except as listed below* with uses *2B, 3C, 3D, 4*.

- *Class 3C - Protected for nongame fish and other aquatic life, including the necessary aquatic organisms in their food chain.*

- *Class 4 - Protected for agricultural uses including irrigation of crops and stock watering.*

However, the Plain City Canal can be designated as a tributary to Mill Creek, a stream not specifically classified, an agricultural irrigation canal, or a drainage canal. DWQ believes that the Ogden Nature Center has modified the Plain City Canal into an irrigation canal. Therefore, the designated beneficial uses for the Plain City Canal are per UAC R317-2-13.13.9 *All irrigation canals and ditches statewide, except as otherwise designated* uses *2B, 3E, 4*.

- *Class 3E - Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.*

Per UAC R317-2-8 Protection of Downstream Uses, all actions to control waste discharges under these rules shall be modified as necessary to protect downstream designated uses.

WATER QUALITY STANDARDS

Numeric criteria based on designated beneficial uses are specified in UAC R317-2-14. In addition, narrative water quality standards must not be violated per UAC R317-2-7.2:

> *It shall be unlawful, and a violation of these rules, for any person to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures; or determined by biological assessments in Subsection R317-2-7.3.*

No permit may be issued by the Director per UAC R317-8-2.2(7) to a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the

violation of water quality standards. The owner or operator of a new source or [a] new discharger proposing to discharge into a water segment which does not meet Utah water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by the UPDES rules and for which the Director has performed a wasteload allocation for the pollutants to be discharged, must demonstrate, before the close of the public comment period, that:

(a) There are sufficient remaining wasteload allocations to allow for the discharge; and
(b) The existing dischargers into the segment are subject to schedules of compliance designed to bring the segment into compliance with Utah Water Quality Standards. (See UAC R317-2.)

CRITICAL LOW FLOW

Typically, the critical flow for the receiving water in a wasteload analysis is considered the lowest stream flow for seven consecutive days with a ten-year return frequency (7Q10). The only upstream monitoring data available for the Mill Creek receiving water was located at USGS 0411433111564801 Mill Creek Near Pioneer Power Plant approximately 3.6 miles upstream and used to evaluate ambient or background flow conditions. However, extremely limited flow rate data was available from 1979 and 1980. Since Plain City Canal is considered a water of the state, it is identified as the receiving water. However, no discharge measurements are available. A site inspection of the Plain City Canal on March 10, 2021 at baseflow conditions, exhibited negligible flow. For these reasons, no flow conditions in the receiving water are reasonable and requires that the wasteload analysis compliance point be at Outfall 001. Since there is no upstream flow, the 7Q10 is assumed to be zero and effluent limits revert to end-of-pipe (EOP) water quality standards.

Due to severe lack water quality data, upstream water quality inputs were estimated. Upstream hardness, pH, and temperature were assumed to be consistent with estimated data provided in the 2015 and 2021 wasteload analyses.

RECEIVING WATER ASESSMENT AND TOTAL MAXIMUM DAILY LOAD (TMDL)

According to the Utah's Final 2024 Integrated Report on Water Quality dated April 30, 2024 (UDWQ, 2024), the receiving water for Outfalls 001 and 002 discharge "*Weber River, from Great Salt Lake to Slaterville diversion, except as listed below* (AU name: *Weber River-1,* AU ID: *UT16020102-001_00*)" was listed as "Not Supporting" for Benthic Macroinvertebrates Bioassessment. The receiving waters do not have an approved TMDL for any parameters.

MIXING ZONE

Per UAC R317-2-5, the maximum allowable mixing zone is 15 minutes of travel time for acute conditions, not to exceed 50% of stream width, and 2,500 feet for chronic conditions. Water quality standards must be met at the end of the regulatory mixing zone. In this case, because the 7Q10 was assumed to be zero, no mixing zone is allowed, and no dilution factor was applied.

PARAMETERS OF CONCERN

The potential parameters of concern identified for the discharge/receiving water were determined in consultation with the UPDES Permit Writer, the Utah Water Quality Assessment Reports, and the industry SIC codes from https://www.osha.gov/data/sic-search. The potential parameters of concern for this facility include: Temperature, TDS, BOD5, metals, and major ions. Utah DWQ evaluated the BOD5 to achieve a minimum DO concentration (DO sag) of 5.0 mg/l according to

R317-2.14.2. The BOD5 concentration will remain 25 mg/l, as in the 2015 and 2021 wasteload analyses.

WET LIMITS

The percent of effluent in the receiving water in a fully mixed condition, and acute and chronic dilution in a not fully mixed condition are calculated in the WLA in order to generate WET limits. The LC_{50} (lethal concentration, 50%) percent effluent for acute toxicity and the IC_{25} (inhibition concentration, 25%) percent effluent for chronic toxicity, as determined by the WET test, needs to be below the WET limits, as determined by the WLA. The WET limit for LC_{50} is typically 100% effluent and does not need to be determined by the WLA.

WET limits for Outfall 001 for IC25 should be based on 100% effluent due to critical low flow conditions of zero.

WASTELOAD ALLOCATION METHODS

Effluent limits were determined for conservative constituents using a simple mass balance mixing analysis (UDWQ 2021). The mass balance analysis is summarized in the Wasteload Addendum.

The water quality standard for chronic ammonia toxicity is dependent on temperature and pH, and the water quality standard for acute ammonia toxicity is dependent on pH. Background data were not sampled for this location. To evaluate effluent discharge water quality, the discharge monitoring report (DMR) would typically be used. Due to a lack of flow dilution, effluent limits for this discharge are water quality standards for the specific receiving water. The applicable water quality standards are attached as an appendix to this wasteload.

For parameters without a WQBEL, permit limits should be set according to rules found in R317-1-3 and categorical UPDES discharge requirements.

Models and supporting documentation are available for review upon request.

ANTIDEGRADATION LEVEL I REVIEW

The objective of the Level I Antidegradation Review (ADR) is to ensure the protection of existing uses, defined as the beneficial uses attained in the receiving water on or after November 28, 1975. No evidence is known that the existing uses deviate from the designated beneficial uses for the receiving water. Therefore, the beneficial and existing uses will be protected if the discharge remains below the WQBELs presented in this wasteload.

ANTIDEGRADATION LEVEL II REVIEW REQUIREMENTS

A Level II ADR is not required for this facility. This is an existing effluent discharge and the permittee is not requesting an increase in flow over that authorized in the existing permit.

LOCATION MAP

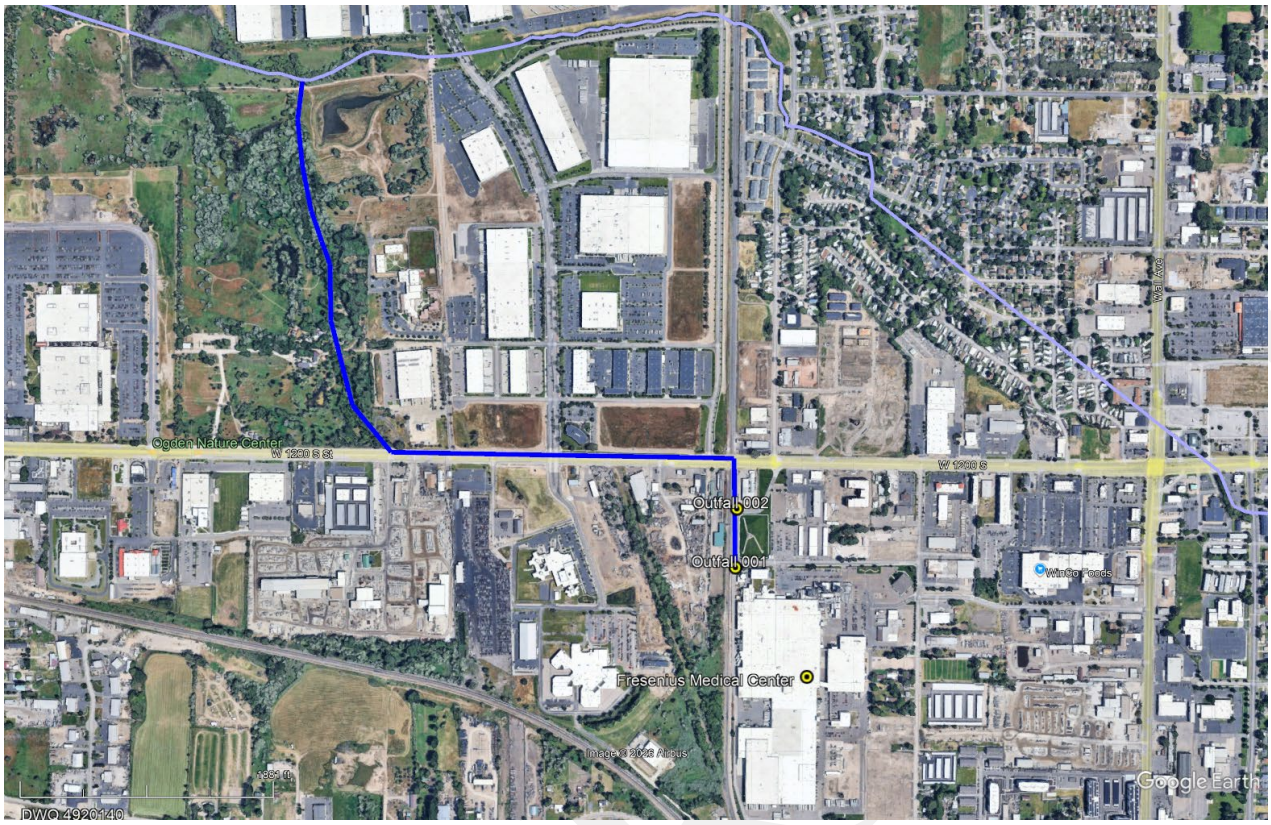

Figure 1: Location map of outfalls, monitoring locations, and surface water channels.

OUTFALL LOCATIONS

001	**41 14 32, -111 59 22**	**Mill Creek in Ogden UT**
002	**41 14 36, -111 59 74**	**Mill Creek in Ogden UT**

DOCUMENTS

WLA Document*: 260124-Fresenius_EOP_WLA_2026.docx*
Wasteload Analysis and Addendums: *260124-Fresenius_EOP_WLA_2026.xlsm*

REFERENCES

Utah Division of Water Quality. 2024. Final 2024 Integrated Report on Water Quality. https://lf-public.deq.utah.gov/WebLink/DocView.aspx?id=87957&repo=Public&searchid=fcd9ea4c-51e1-4227-aa29-fb1921c2cc19&cr=1

Utah Division of Water Quality. 2021. Utah Wasteload Analysis Procedures Version 2.0. https://documents.deq.utah.gov/water-quality/standards-technical-services/DWQ-2021-000684.pdf

WASTELOAD ANALYSIS [WLA] Date: 1/26/2026

Appendix A: Mass Balance Mixing Analysis for Conservative Constituents

A Level II Antidegradation Review (ADR) is NOT required for this facility.

Discharging Facility:	Fresenius Medical Care		
UPDES No:	7UT0023752		
	NA		
Permit Flow [MGD]:	0.07000	Annual	Max. Daily
	0.07000	Annual	Max. Monthly
Receiving Water:	concrete storm drain to Plain City Canal to Mill Creek to Weber River to Great Salt Lake		
Stream Classification:	2B,3C,3D,4		
Stream Flows [cfs]:	0.00	All Seasons	Critical Low Flow
	-	All Seasons	Critical Low Flow (20th %)
Fully Mixed:	YES		
Acute River Width:	100%		
Chronic River Width:	100%		

Modeling Information

A mass balance mixing analysis was used to determine the effluent limits.

All model numerical inputs, intermediate calculations, outputs and graphs are available for discussion, inspection and copy at the Division of Water Quality.

Effluent Limitations

Current State water quality standards are required to be met under a variety of conditions including in-stream flows targeted to the 7-day, 10-year low flow (R317-2-9).

Other conditions used in the modeling effort reflect the environmental conditions expected at low stream flows.

The calculations in this wasteload analysis utilize the maximum effluent discharge flow of 0.07 MGD. If the discharger is allowed to have a flow greater than 0.07 MGD during 7Q10 conditions, and effluent limit concentrations as indicated, then water quality standards will be violated. In order to prevent this from occuring, the permit writers must include the discharge flow limititation as indicated above; or, include loading effluent limits in the permit.

Effluent Limitations for Protection of Recreation (Class 2B Waters) (R317-2-14.1)

Physical Parameter	Concentration Minimum	Maximum
pH	6.5	9.0
Turbidity Increase (NTU)		10.0

Bacteriological (R317-2-14.1)		
E. coli (30 Day Geometric Mean)	206	(#/100 mL)
E. coli (Maximum)	668	(#/100 mL)

Effluent Limitations for Protection of Aquatic Wildlife (Class 3C Waters) (R317-2-14.2)

Physical Parameter	Concentration Minimum	Maximum
pH	6.5	9.0
Turbidity Increase (NTU)		15.0
Temperature (deg C)		27
Temperature Change (deg C)		4

Dissolved Oxygen (mg/L)	Minimum Concentration ELS Present	Others Present
Instantaneous	3.0	3.0

30-day Average	5.0	5
7-day Average		

Inorganics	Chronic (30-day ave)	Acute (1-hour ave)
Parameter		Standard
Phenol (mg/L)		0.010
Hydrogen Sulfide (Undissociated-mg/L)		0.002
Total Residual Chlorine (mg/L)	0.011	0.019

Ammonia-Total (mg/L)

	Chronic (30-day ave)			Acute (1-hour ave)		
	ELS Present					
Season	Standard	Background	Limit	Standard	Background	Limit
Summer	5.1		5.1	26.2		26.2
Fall	2.1		2.1	6.9		6.9
Winter	2.4		2.4	8.4		8.4
Spring	2.4		2.4	8.4		8.4

	ELS Absent					
Season	Standard	Background	Limit	Standard	Background	Limit
Summer	5.2		5.2	26.2		26.2
Fall	2.5		2.5	6.9		6.9
Winter	4.0		4.0	8.4		8.4
Spring	3.4		3.4	8.4		8.4

Metals-Total Recoverable

	Chronic (4-day ave)			Acute (1-hour ave)		
Parameter	Standard[1]	Background	Limit	Standard[1]	Background	Limit
Aluminum (µg/L)	87.0		87.0	750.0		750.0
Arsenic (µg/L)	150.0		150.0	340.0		340.0
Cadmium (µg/L)	1.9		1.9	5.6		5.6
Chromium VI (µg/L)	11.0		11.0	16.0		16.0
Chromium III (µg/L)	211.9		211.9	4,434		4,434
Copper (µg/L)	23.9		23.9	39.4		39.4
Cyanide (µg/L)[2]	5.2		5.2	22.0		22.0
Iron (µg/L)				1,000		1,000
Lead (µg/L)	12.9		12.9	330.6		330.6
Mercury (µg/L)[2]	0.012		0.012	2.4		2.4
Nickel (µg/L)	132.1		132.1	1,188		1,188
Selenium (µg/L)	4.6		4.6	18.4		18.4
Silver (µg/L)				25.0		25.0
Tributylin (µg/L)[2]	0.072		0.072	0.46		0.46
Zinc (µg/L)	303.9		303.9	303.9		303.9

1: Based upon a Hardness of 0 mg/l as CaCO3

2: Background concentration assumed 67% of chronic standard

Organics [Pesticides]

	Chronic (4-day ave)		Acute (1-hour ave)	
Parameter	Standard	Limit	Standard	Limit
Aldrin (µg/L)			1.5	1.5
Chlordane (µg/L)	0.0043	0.0043	1.2	1.2
DDT, DDE (µg/L)	0.001	0.001	0.55	0.55
Diazinon (µg/L)	0.17	0.17	0.17	0.17
Dieldrin (µg/L)	0.0056	0.0056	0.24	0.24
Endosulfan, a & b (µg/L)	0.056	0.056	0.11	0.11
Endrin (µg/L)	0.036	0.036	0.086	0.086
Heptachlor & H. epoxide (µg/L)	0.0038	0.0038	0.26	0.26
Lindane (µg/L)	0.08	0.08	1.0	1.0
Methoxychlor (µg/L)			0.03	0.03
Mirex (µg/L)			0.001	0.001
Nonylphenol (µg/L)	6.6	6.6	28.0	28.0
Parathion (µg/L)	0.0130	0.0130	0.066	0.066
PCB's (µg/L)	0.014	0.014		

Pentachlorophenol (µg/L)	15.0	15.0	19.0	19.0
Toxephene (µg/L)	0.0002	0.0002	0.73	0.73

Radiological	Maximum Concentration
Parameter	Standard
Gross Alpha (pCi/L)	15

Effluent Limitations for Protection of Aquatic Wildlife (Class 3D Waters) (R317-2-14.2)

Physical	Concentration	
Parameter	Minimum	Maximum
pH	6.5	9.0
Turbidity Increase (NTU)		15.0
Temperature (deg C)		
Temperature Change (deg C)		

Dissolved Oxygen (mg/L)	Minimum Concentration	
	ELS Present	Others Present
Instantaneous	3.0	3.0
30-day Average	5.0	5
7-day Average		

Inorganics		Acute Standard (1 Hour Average)
Parameter		Standard
Phenol (mg/L)		0.010
Hydrogen Sulfide (Undissociated) [mg/L]		0.002
Total Residual Chlorine (mg/L)	0.011	0.019

Ammonia-Total (mg/L)

	Chronic (30-day ave)			Acute (1-hour ave)		
ELS Present						
Season	Standard	Background	Limit	Standard	Background	Limit
Summer	5.1		5.1	26.2		26.2
Fall	2.1		2.1	6.9		6.9
Winter	2.4		2.4	8.4		8.4
Spring	2.4		2.4	8.4		8.4
ELS Absent						
Season	Standard	Background	Limit	Standard	Background	Limit
Summer	5.2		5.2	26.2		26.2
Fall	2.5		2.5	6.9		6.9
Winter	4.0		4.0	8.4		8.4
Spring	3.4		3.4	8.4		8.4

Metals-Total Recoverable

	Chronic (4-day ave)			Acute (1-hour ave)		
Parameter	Standard[1]	Background	Limit	Standard[1]	Background	Limit
Aluminum (µg/L)	87.0		87.0	750.0		750.0
Arsenic (µg/L)	150.0		150.0	340.0		340.0
Cadmium (µg/L)	1.9		1.9	5.6		5.6
Chromium VI (µg/L)	11.0		11.0	16.0		16.0
Chromium III (µg/L)	211.9		211.9	4,434		4,434
Copper (µg/L)	23.9		23.9	39.4		39.4
Cyanide (µg/L)[c]	5.2			22.0		22.0
Iron (µg/L)				1,000		1,000
Lead (µg/L)	12.9		12.9	330.6		330.6
Mercury (µg/L)[c]	0.012		0.012	2.4		2.4
Nickel (µg/L)	132.1		132.1	1,188		1,188
Selenium (µg/L)	4.6		4.6	18.4		18.4
Silver (µg/L)				25.0		25.0
Tributylin (µg/L)[c]	0.072		0.072	0.46		0.46
Zinc (µg/L)	303.9		303.9	303.9		303.9

1: Based upon a Hardness of 300 mg/l as CaCO3

2: Background concentration assumed 67% of chronic standard

Organics [Pesticides]

Parameter	Chronic (4-day ave) Standard	Chronic (4-day ave) Limit	Acute (1-hour ave) Standard	Acute (1-hour ave) Limit
Aldrin (µg/L)			1.5	1.5
Chlordane (µg/L)	0.0043	0.0043	1.2	1.2
DDT, DDE (µg/L)	0.001	0.001	0.55	0.55
Diazinon (µg/L)	0.17	0.17	0.17	0.17
Dieldrin (µg/L)	0.0056	0.0056	0.24	0.24
Endosulfan, a & b (µg/L)	0.056	0.056	0.11	0.11
Endrin (µg/L)	0.036	0.036	0.086	0.086
Heptachlor & H. epoxide (µg/L)	0.0038	0.0038	0.26	0.26
Lindane (µg/L)	0.08	0.08	1.0	1.0
Methoxychlor (µg/L)			0.03	0.03
Mirex (µg/L)			0.001	0.001
Nonylphenol (µg/L)	6.6	6.6	28.0	28.0
Parathion (µg/L)	0.0130	0.0130	0.066	0.066
PCB's (µg/L)	0.014	0.014		
Pentachlorophenol (µg/L)	15.0	15.0	19.0	19.0
Toxephene (µg/L)	0.0002	0.0002	0.73	0.73

Radiological

Parameter	Maximum Concentration Standard
Gross Alpha (pCi/L)	15

Effluent Limitations for Protection of Agricultural Water (Class 4 Waters) (R317-2-14.1)

Physical

Parameter	Concentration Minimum	Concentration Maximum
pH	6.5	9.0

Metals-Dissolved Maximum

Parameter	Standard[1]	Maximum Background	Limit
Total Dissolved Solids (mg/L)	1,200		1200.0
Arsenic (µg/L)	100.0		100.0
Cadmium (µg/L)	10.0		10.0
Chromium (µg/L)	100.0		100.0
Copper (µg/L)	200.0		200.0
Lead (µg/L)	100.0		100.0
Selenium (µg/L)	50.0		50.0

Inorganics-Maximum

Parameter	Standard[1]	Maximum Background	Limit
Boron (mg/L)	0.75		0.75

Radiological

Parameter	Maximum Concentration Standard
Gross Alpha (pCi/L)	15

Freshwater total ammonia criteria based on Title R317-2-14 Utah Administrative Code
Acute

INPUT	Summer	Fall	Winter	Spring
pH:	7.30	8.10	8.00	8.00
Beneficial use classification:	3C	3C	3C	3C

OUTPUT				
Total ammonia nitrogen criteria (mg N/L):				
Acute (Class 3A):	17.506	4.641	5.615	5.615
Acute (Class 3B, 3C, 3D):	**26.214**	**6.948**	**8.408**	**8.408**

Freshwater total ammonia criteria based on Title R317-2-14 Utah Administrative Code
Chronic

INPUT	Summer	Fall	Winter	Spring
Temperature (deg C):	14.00	12.00	4.00	9.40
pH:	7.30	8.10	8.00	8.00
Are fish early life stages present?	No	No	No	No

OUTPUT				
Total ammonia nitrogen criteria (mg N/L):				
Chronic - Fish Early Life Stages Present:	5.077	2.097	2.434	2.434
Chronic - Fish Early Life Stages Absent:	**5.250**	**2.467**	**3.952**	**3.385**