Hexcel FSSOB UT0025305 Page 1

Official Draft Public Notice Version **March 14, 2024** 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 HEXCEL CORPORATION HEXCEL SALT LAKE CITY RENEWAL PERMIT: DISCHARGE UPDES PERMIT NUMBER: UT0025305 MINOR INDUSTRIAL

FACILITY CONTACTS

Contact:TPosition:SPhone Number:(3)

Tyson Hone Site Environmental Manager (385) 831-3472

Person Name: Position: Phone Number:

Permittee: Facility Name: Mailing Address:

Telephone: Actual Address: Drew Patterson Plant Manager (256) 340-4090

Hexcel Corporation Hexcel Salt Lake City PO Box 18748 Salt Lake City, Utah 84118-0748 801-508-8000 6800 West 5400 South

DESCRIPTION OF FACILITY

Hexcel Salt Lake City (Hexcel) manufactures carbon fibers, epoxy resins, uni-directional carbon graphite cloth and woven carbon graphite fiber epoxy resin impregnated cloth (pre-preg). The following Standard Industrial Classification (SIC) codes apply: 2824 Manmade Organic Fibers-Except Cellulosic and; 2821 Plastics Materials, Synthetic Resins, and Non-vulcanizable Elastomers.

There are 14 fiber lines, several pre-preg lines, and several uni-directional cloth lines. The process of manufacturing carbon fiber begins with spools of polyacrylonitrile (PAN). PAN is strung through a series of ovens and rollers. The fiber is then washed and cooled in an ammonium bicarbonate bath and rinsed in water. Drag-out of the carbon fiber from the ammonia bicarbonate bath is a source of ammonia in the rinse water. The rinse water is constantly being filled, and the overflow goes to the permitted outfall. The clean fiber then goes through a sizing process. Sizing is an aqueous solution of resin that the fiber is dipped in and then dried before it is spooled and packaged for shipping. If there is any waste of the sizing solution, it is discharged to the sanitary sewer (Central Valley Water Reclamation Facility). The waste from the ammonium bicarbonate bath also goes to the sewer. There is no wastewater generated in the production of epoxy resin, uni-directional cloth, or pre-preg.

The wastewater discharged at Outfall 001 consists of carbon fiber rinse water, reverse osmosis reject water, pump sealing cooling water, cooling tower blow down, steam condensate, and non-contact cooling water.

These waters are collected at the point of generation and then flow via an underground pipeline to a pond at West Ridge Golf Course, now known as The Ridge Golf Club (Golf Club). Hexcel has demonstrated that the effluent can meet the effluent permit limits without treatment; therefore, there are no treatment units within the system.

Storm water from Hexcel property is captured by an extensive stormwater draining system that directs stormwater to four (4) retention basins and one (1) detention basin. The water from the retention ponds either evaporates or percolates into the soil. The detention basin facilitates sediments removal or containing possible other containments, and if water reach reaches a certain height, it is discharged with process water.

Past Permit Cycles:

For the 2008 renewal permit for Hexcel specified the receiving stream as a pond at the Golf Club. This is a private pond used to irrigate the golf course. After a site visit was conducted by Division of Water Quality (DWQ) Staff in September 2009, it was observed that Hexcel's effluent discharges either directly to the pond or to the Utah and Salt Lake Canal (USL Canal) depending on the volume of water in the pond. It was also observed that excess water in the pond may be returned, similar to irrigation return water flows, to the USL Canal.

Given the fact that the pond is a private pond and the fact that Hexcel can discharge to the USL Canal either directly or once the effluent has co-mingled with water in the pond, DWQ made the determination that the appropriate receiving water was the USL Canal and not the pond. The receiving water, USL Canal, was designated as a Class 4, which in 2008 did not have an ammonia Water Quality Standard associated with it. Therefore, the requirement in the renewal permit to monitor ammonia was not included in the modified permit.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

During the permit cycle from 2018 to 2023, a highway was constructed between Hexcel and the Golf Club. It was at this time that the West Valley City improved the course and modified the previous water flow for the ponds and the Golf Club. Instead of Hexcel discharge water going to the USL Canal, all of the water now flows through the ponds to be used for irrigation at the golf course. If water storage capacity in the ponds has been maximized, or the Golf Course needs to release water for any reason, it will flow out of the ponds to the north and enter the storm drains that follow 5600 West towards Highway 201. Before reaching Highway 201, the storm drains discharge into the Riter Canal which flows west and meets up with other canals that flow on and around the Kennecott property. This is also what happens to the flows in the USL Canal. After reviewing the changes and maps of the area and canals, DWQ determined that the water is going to the same receiving waters and that no Level II Antidegradation Review (L2ADR) is required for this change is receiving water for this Permit renewal.

The pond at the Golf Club receives water from the USL Canal, a local culinary water provider, and Hexcel. Hexcel obtains water for its processes from the same culinary water provider. This water is then used to irrigate the Golf Club. DWQ has determined that this activity does not qualify as "Reuse" under DWQ Rules, and thus, there will be no inclusion of those provisions in the Permit at this time.

It was clarified in 2020 through a rule change that the Utah Secondary Treatment Standards, Utah Administrative Code (UAC) R317-1-3.2 for total suspended solids (TSS) and biochemical oxygen demand (BOD5) do not apply to industrial dischargers in Utah. As a result of this rule change, the effluent limitations in the previous permits for these pollutants are no longer applicable and have been removed from the permit.

These effluent limits for TSS and BOD may be removed from the permit without violating the "Antibacksliding Requirements" because the new information regarding them, change in Secondary Treatment Standards, UAC R317-1-3.2, has become available.

All Waste Load Allocations (WLA) developed by DWQ for UPDES discharge permits now take into consideration the downstream uses of the receiving water. For this permit renewal this resulted in the addition of the 3E classification to the Riter Canal and, thus, the inclusion of ammonia effluent limitations.

The result of a Reasonable Potential Analysis (RP) Analysis on TSS indicated that there was no RP for TSS found in the effluent. The effluent limit for this pollutant of concern has been removed, and monitoring has ceased. RP Analysis on BOD indicated that there was RP for BOD in the effluent, however the data contained three outliers that were attributed to ammonia in the effluent. After completing the review of the RP Analysis and reviewing monitoring data, DWQ has determined it is reasonable to expect Hexcel to have nitrogen, most likely in the form of ammonia, in the effluent. This is a result of drag out from the electrolytic process which is conducted in an aqueous solution that contains ammonia bicarbonate.

As a result of the monitoring data, the changes in WLA, and the change in the Utah Secondary Standards, Hexcel is required to switch from monitoring for BOD to monitoring for total nitrogen (as ammonia) in the effluent. In addition, seasonal ammonia limits from the WLA will be implemented in the permit.

In order to allow Hexcel Corporation time to determine how best to come into compliance with the ammonia limits a Compliance Schedule will be included in this permit renewal. The compliance schedule will delay the effective date of the new ammonia limits until December 31, 2025. There will be no interim ammonia limit.

The Compliance Schedule will require the submission of several progress reports to document the progress toward compliance with the new limits. The first report will be due by December 1, 2024, and should include an evaluation of the source of the ammonia in the effluent, a plan to attain compliance by December 31, 2025, deadline, and description of the efforts the up to that point. The second report will be due June 1, 2025, and should include an update to items in the first report, an estimated time until full compliance, and if needed, any changes to the permit that Hexcel Corporation might request. If no permit modification is requested, final limits will go into effect on January 1, 2026.

These effluent limits for TSS and BOD may be removed from the permit without violating the "Antibacksliding Requirements" because the new information regarding them, change in Secondary Treatment Standards, UAC R317-1-3.2, has become available.

Effluent Limitation Changes								
	Old Permit Limits New Permit Limits							
Parameter	Maximum Monthly Avg	Maximum Weekly Avg	Maximum Monthly Avg	Maximum Weekly Avg	Daily Maximum			
BOD ₅ , mg/L	25	35	-	-	-			
TSS, mg/L	25	35	-	-	-			

Total Ammonia (as					
N), mg/L					
Summer (Jul-Sep)	-	-	45.1	-	151.7
Fall (Oct-Dec)	-	-	41.5	-	94.8
Winter (Jan-Mar)	-	-	6.6	-	21.7
Spring (Apr-Jun)	-	-	53.6	-	119.6

Self-Monitoring Requirements Changes								
	Old Permit Monitoring New Permit Monitoring							
Parameter	Frequency	Sample Type	Units	Frequency	Sample Type	Units		
BOD ₅	Monthly	Grab	mg/L	-				
TSS	Monthly	Grab	mg/L	-	-	-		
Ammonia	-	-	-	Monthly	Grab	mg/L		

The Water Quality Board adopted UAC R317-1-3.3, Technology-Based Phosphorus Effluent Limit (TBPEL) Rule in 2014. Hexcel has demonstrated that the effluent can meet the effluent permit limits without treatment, therefore, there are no treatment units within the system. As a result, the TBPEL does not apply.

DISCHARGE

DESCRIPTION OF DISCHARGE

Hexcel has one discharge point, Outfall 001, that is located at Latitude 40° 39' 17.65" and Longitude 112° 02' 42.85" along the north-east boundary of Hexcel's property at approximately 5400 South and 6500 West in Salt Lake County. The effluent passes through a vault just prior to crossing Hexcel's property line on the northeast boundary. There is a V-notch weir located in the vault where flow is measured and samples are collected.

Hexcel has been reporting self-monitoring results on Discharge Monitoring Reports (DMRs) on a monthly basis. A summary of the last 5 years of data is attached. In the past 5 years, Hexcel has had two violations of the BOD5 30-day average and daily max effluent limit. Both were in the Fall of 2022, and neither resulted in an enforcement action.

<u>Outfall</u>

Description of Discharge Point

001

Located at latitude $40^{\circ} 39' 17.65"$ and longitude $112^{\circ} 02' 42.85"$. The discharge is piped underground beneath the property line and the Mountain View Corridor to a pond on the Golf Club. The ponds are for irrigation use only, and any unused irrigation water flows through storm drains to the Riter Canal.

RECEIVING WATERS AND STREAM CLASSIFICATION

The final discharge is to the Riter Canal which is classified as 2B, 3E, 4, according to UAC R317-2-13:

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 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.
- Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.

TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

The receiving stream (Riter Canal) for this discharger is not currently listed as impaired According to the Utah's 2023 303(d) Water Quality Assessment Report dated March 8, 2022.

BASIS FOR EFFLUENT LIMITATIONS

Reasonable Potential Analysis

Since January 1, 2016, DWQ has conducted RP analysis 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). There are four outcomes defined in the RP Guidance: Outcome A, B, C, or D. These Outcomes provide a frame work for what routine monitoring or effluent limitations are required

A quantitative RP analysis was performed on BOD and TSS to determine if there was reasonable potential for the discharge to exceed the applicable water quality standards. Based on the RP analysis, BOD and TSS limits were removed from the permit, but monitoring and an effluent limit for ammonia were added. A copy of the RP analysis is included at the end of this Fact Sheet.

The inclusion of effluent limitations on pH is based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. The inclusion of effluent limitations on total dissolved solids (TDS) and Flow are based on best professional judgement (BPJ) and RP Analysis. The inclusion of effluent limitations on ammonia is based on the WLA and RP. Attached is a WLA for this discharge. It has been determined that this discharge will not cause a violation of water quality standards. The permittee is expected to be able to comply with these limitations.

The permit limitations are:

	Effluent Limitations ¹					
Parameter	Maximum	Maximum	Daily	Daily		
	Monthly Avg	Weekly Avg	Minimum	Maximum		
Interim Effluent Limit	ts, Permit Effecti	ve Date through	December 31	, 2025		
Total Flow, MGD ² , ³	0.6	-	-	-		
pH, Standard Units	-	-	6.5	9		
TDS, mg/L	-	-	-	1200		
Fina	s, January 1, 20	26				
Total Flow, MGD ² , ³	0.6	-	-	-		
pH, Standard Units	-	-	6.5	9		
TDS, mg/L	-	-	_	1200		

	Effluent Limitations ¹						
Parameter Maximum Maximum Daily Da							
	Monthly Avg	Weekly Avg	Minimum	Maximum			
Total Ammonia (as N),							
mg/L							
Summer (Jul-Sep)	Summer (Jul-Sep) 45.1 - 151.7						
Fall (Oct-Dec)	ec) 41.5 - 94.8						
Winter (Jan-Mar)	Jan-Mar) 6.6 21.7						
Spring (Apr-Jun)	Spring (Apr-Jun) 53.6 119.6						
1. See Definitions, Part VIII, for definition of terms							
2. 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.							
3. If the rate of discharge is	controlled, the rat	e and duration of	discharge shall	be reported.			

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements have been modified, as described earlier, from the previous permit. The permit will require reports to be submitted monthly and annually, as applicable, on DMR forms due 28 days after the end of the monitoring period. Effective January 1, 2017, monitoring results must be submitted using NetDMR unless the permittee has successfully petitioned for an exception. Lab sheets for biomonitoring must be attached to the biomonitoring DMR. Lab sheets for metals and toxic organics must be attached to the DMRs.

Self-Monitoring and Reporting Requirements ¹							
Parameter	Frequency	Sample Type	Units				
Total Flow ² , ³	Monthly	Instantaneous	MGD				
Ammonia (as N)	Ammonia (as N) Monthly Grab mg/L						
pН	Monthly Grab SU						
TDS	TDS Monthly Grab mg/L						
1. See Definitions, Part VIII, for	1. See Definitions, Part VIII, for definition of terms						
2. 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.							
3. If the rate of discharge is cont	trolled, the rate and duration of discl	harge shall be reported.					

BIOSOLIDS

All sanitary wastes generated on site go to local sanitary sewer district and are treated at the Central Valley Water Reclamation Facility. Therefore, they do not generate any biosolids, and there will be no biosolids requirements included in the permit.

STORM WATER

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 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.

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

PRETREATMENT REQUIREMENTS

The permittee discharges waste from the sizing process and ammonium bicarbonate bath to the Central Valley Water Reclamation Facility Publicly Owned Treatment Works (POTW). Therefore, the permittee must meet the Central Valley Water Reclamation Facility Rule requirements as an Industrial User discharging to a POTW. The discharges from the carbon fiber rinse water, reverse osmosis reject water, pump sealing cooling water, cooling tower blow down, steam condensate and non-contact cooling water from Outfall 001.

Any waste discharged to a POTW, either as an Indirect Discharge or as a hauled waste, is subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at 40 CFR 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 waste.

In addition, in accordance with 40 CFR 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 they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under 40 CFR 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 discharges to either a private golf course pond or to a canal with designated beneficial uses of 2B, 3E, 4. The receiving stream water quality monitoring data indicate no impairment of the canal and the receiving water body is not a fishery. Therefore, no WET limits and no toxicity testing requirements are included in this renewal permit. 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 effluent during this permit cycle

Hexcel FSSOB UT0025305 Page 8

PERMIT DURATION

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

Drafted and Reviewed by Daniel Griffin, Discharge Permit Writer, Reasonable Potential Analysis Jennifer Robinson, Pretreatment Lonnie Shull, Biomonitoring Suzan Tahir, Wasteload Analysis Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE

Began: Month Day, 2024 Ended: Month Day, 2024

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 Division of Water Quality Public Notice Webpage.

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.

Hexcel FSSOB UT0025305 Page 9

ATTACHMENT 1

Effluent Monitoring Data



	2018 to 2023 Effluent Monitoring Data					
	Month	Flow	BOD	TSS	pН	TDS
		Max	Chronic / Acute	Chronic / Acute	Max/Min	Max
		0.6	25/35	25/35	9/6.5	1200
		MGD	mg/L	mg/L	SU	mg/L
	Feb-18	0.202	22	< MDL	7.5	390
	Mar-18	0.202	22	< MDL	7.5	350
	Apr-18	0.134	< MDL	< MDL	7.6	270
	May-18	0.166	15	< MDL	7.2	260
	Jun-18	0.106	< MDL	< MDL	7.4	350
	Jul-18	0.061	10	< MDL	7	370
	Aug-18	0.081	10	< MDL	7.5	310
	Sep-18	0.081	8	< MDL	7.3	220
	Oct-18	0.061	17	< MDL	7.8	210
	Nov-18	0.044	12	< MDL	7.1	460
	Dec-18	0.061	5	< MDL	7.8	460
	Jan-19	0.061	6	< MDL	7.2	330
	Feb-19	0.061	< MDL	< MDL	6.9	340
	Mar-19	0.166	16	< MDL	7.2	300
	Apr-19	0.044	8	< MDL	7.2	280
	May-19	0.061	11		7.4	430
	Jun-19	0.061	8	< MDL	7.8	470
	Jul-19	0.134	16	< MDL	7.9	290
	Aug-19	0.061	10	< MDL	7.1	320
	Sep-19	0.061	17.6	< MDL	7.2	420
	Oct-19	0.044	14.2	3	7.5	436
	Nov-19	0.044	6.43	< MDL	7.6	192
	Dec-19	0.044	19.6	4.4	7.2	342
	Jan-20	0.044	6.94	< MDL	7	318
	Feb-20	0.044	< MDL	4.8	8.1	458
	Mar-20	0.044	7.55	< MDL	7.7	276
	Apr-20	0.044	< MDL	< MDL	7.7	412
	May-20	0.030	6.39	< MDL	7.5	416
	Jun-20	0.044	14.5	< MDL	7.3	452
	Jul-20	0.044	12.5	3.2	7.5	192
	Aug-20	0.019	< MDL	< MDL	7.5	334
	Sep-20	0.019	< MDL	12	7.7	318
	Oct-20	0.011	< MDL	< MDL	7.5	332
	Nov-20	0.005	< MDL	< MDL	7.6	394

Effluent Monitoring Data.

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		2018 to 2	2023 Effluent	t Monitoring	Data		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Month	Flow	BOD	TSS	pН	TDS	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		Max	Chronic / Acute	Chronic / Acute	Max/Min	Max	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Dec-20	0.005	< MDL	< MDL	7.9	490	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Jan-21	0.044	< MDL	< MDL	7.4	322	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Feb-21	0.030	< MDL	< MDL	7.1	340	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Mar-21	0.019	< MDL	< MDL	7.1	226	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Apr-21	0.134	9.37	< MDL	8	336	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	May-21	0.134	24.4	< MDL	7.6	452	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Jun-21	0.202	21	< MDL	8.2	276	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Jul-21	0.166	8.63	< MDL	7.1	344	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Aug-21	0.149	< MDL	4.4	8	356	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Sep-21	0.149	< MDL	< MDL	7.7	280	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Oct-21	0.202	69	3.2	7.3	270	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Nov-21	0.166	60.5	< MDL	7.8	330	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Dec-21	0.202	< MDL	< MDL	7.8	268	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Jan-22	0.222	9.55	< MDL	7.8	376	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Feb-22	0.134	23	< MDL	7.4	380	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Mar-22	0.134	24	< MDL	7.4	388	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Apr-22	0.134	8	< MDL	7.6	284	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	May-22	0.202	10	4	7.9	396	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Jun-22	0.202	5	9	8.1	340	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Jul-22	0.166	5	< MDL	8.1	380	
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Aug-22	0.202	< MDL	< MDL	8.3	344	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Sep-22	0.202	< MDL	< MDL	8	328	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Oct-22	0.202	5	< MDL	8.1	244	
Dec-22 0.134 6 5 8.4 420 Jan-23 0.166 8 4 8.6 420	Nov-22	0.134	< MDL	< MDL	8.1	344	
Jan-23 0.166 8 4 8.6 420	Dec-22	0.134	6	5	8.4	420	
	Jan-23	0.166	8	4	8.6	420	
						<u> </u>	

ATTACHMENT 2

Wasteload Analysis



ATTACHMENT 3

Reasonable Potential Analysis



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 Analysis¹. 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.

It was clarified in 2020 through a rule change that the Utah Secondary Treatment Standards, UAC R317-1-3.2 for TSS and BOD5 do not apply to industrial dischargers in Utah. As a result of this rule change the effluent limitations in the previous permits for these pollutants are no longer applicable and may be removed from the permit. RP Analysis was conducted to clarify if they could be removed.

The RP model was run on TSS using the most recent data back through 2018. This resulted in 60 data points and that there is no Reasonable Potential for TSS. The effluent limit for this pollutant of concern may be removed, and monitoring may cease.

The RP model was run on BOD using the most recent data back through 2018. This resulted in 60 data points and that there is a Reasonable Potential for BOD, but the data contained three outliers that were attributed to ammonia in the effluent. While conducting RP and reviewing monitoring data it has come to the attention that it is reasonable to expect Hexcel to have nitrogen, most likely in the form of ammonia, in the effluent as a result of drag out from the electrolytic process which is conducted in an aqueous solution that contains ammonia bicarbonate.

The existing ammonia data submitted in the lab report as attachments to the DMR was screened against the ammonia WQBEL from the WLA. The screening indicated that a full RP model should be run for ammonia and that they previous effluent concentrations would have resulted in violations of the effluent limits. As a result, running the RP was not needed, and the ammonia limits will be added to the permit.

These effluent limits for TSS and BOD may be removed from the permit without violating the "Anti-backsliding Requirements" because the new information regarding them, change in Secondary Treatment Standards, UAC R317-1-3.2, has become available.

A Summary of the RP Model inputs and outputs are included in the table below.

The Ammonia Screening Table is included in this attachment.

¹ See Reasonable Potential Analysis Guidance for definitions of terms

RP input/output summary

RP Procedure Output		Run #1	Run #2	
Facility Name:	Hexcel			
Permit Number:	UT0025305			
Outfall Number:	_001			
Parameter	TSS			
Distribution	Normal			
Data Units	mg/L			
Significant Figures	2			
Coefficient of Variation (CV)	0.60			
	3	3		
Maximum Repo	12	12		
	95	99		
	1.4	1.9		
Projected Maximum Ef	17	23		
	35	35		
	25	25		
	NO	NO		
	RP for Chronic?	NO	NO	
	Outcome	D	D	

r								
	Data used for TSS RP Run #1, and Run #2							
#		#		#				
1	ND	21	3	41	ND			
2	ND	22	ND	42	ND			
3	ND	23	4.4	43	4.4			
4	ND	24	ND	44	ND			
5	ND	25	4.8	45	3.2			
6	ND	26	ND	46	ND			
7	ND	27	ND	47	ND			
8	ND	28	ND	48	ND			
9	ND	29	ND	49	ND			
10	ND	30	3.2	50	ND			
11	ND	31	ND	51	ND			
12	ND	32	12	52	4			
13	ND	33	ND	53	9			
14	ND	34	ND	54	0			
15	ND	35	ND	55	ND			
16	ND	36	ND	56	ND			
17	ND	37	ND	57	ND			
18	ND	38	ND	58	ND			
19	ND	39	ND	59	5			
20	ND	40	ND	60	4			

RP Procedure Output		Run #1	Run #2	
Facility Name:	Hexcel			
Permit Number:	UT0025305			
Outfall Number:	_001			
Parameter	BOD			
Distribution	Normal			
Data Units	mg/L			
Significant Figures	2			
Coefficient of Variation (CV)	0.60			
	3	3		
Maximum Repo	12	12		
	95	99		
	1.4	1.9		
Projected Maximum Eff	17	23		
	35	35		
	25	25		
	NO	NO		
	NO	NO		
	Outcome	D	D	

Data used for BOD RP Run #1, and Run #2								
#		#		#				
1	33	21	14.2	41	81			
2	52	22	6.43	42	82			
3	ND	23	19.6	43	83			
4	15	24	6.94	44	84			
5	ND	25	ND	45	85			
6	10	26	7.55	46	86			
7	10	27	ND	47	87			
8	8	28	6.39	48	88			
9	17	29	14.5	49	89			
10	12	30	12.5	50	90			
11	5	31	ND	51	91			
12	6	32	ND	52	92			
13	ND	33	ND	53	93			
14	16	34	ND	54	94			
15	8	35	ND	55	95			
16	11	36	ND	56	96			
17	8	37	ND	57	97			
18	16	38	ND	58	98			
19	10	39	9.37	59	99			
20	17.6	40	24.4	60	100			

Ammonia		Summer	Fall	Winter	Spring]
		45.12	41.5	4.4	53.6	
		151.7	94.8	17.5	119.6	
Month	Value			1		
21-Dec	18.2		18.2			
22-Jan	5.79			5.79		
22-Feb	21.4			21.4		
22-Mar	19.1			19.1		
22-Apr	14.8				14.8	
22-May	17.1				17.1	
22-Jun	21.5				21.5	
22-Jul	57.7	57.7				
22-Aug	36.3	36.3				
22-Sep	35.9	35.9				
22-Oct	41.3		41.3			
22-Nov	8.77		8.77			
22-Dec	15.9		15.9			
23-Jan	15.9			15.9		
23-Feb	6.2			6.2		
23-Mar	9.78			9.78		
23-Apr	26.2				26.2	
	Max	57.7	41.3	21.4	26.2	
Chronic						
WQBEL		45.12	41.5	4.4	53.6	
RP Check		Yes	Yes	Yes	No	
Effluent Violation		Yes	No	Yes	No	
Acute						
WQBEL		151.7	94.8	17.5	119.6	
RP Check		No	No	Yes	No	
Effluent Violation		No	No	Yes	No	