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**FACT SHEET STATEMENT OF BASIS
WEIR MINERALS NA SLC - RUBBER ENGINEERING
RENEWAL DISCHARGE PERMIT
UPDES PERMIT NUMBER: UT0024767
MINOR INDUSTRIAL**

FACILITY CONTACTS

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DESCRIPTION OF FACILITY

Weir Minerals, NA SLC – Rubber Engineering (WMRE) is a molded rubber products manufacturer, and is located at 3459 South 700 West, Salt Lake County, Utah. The latitude is 40°41'48" and longitude 111°54'30". The Standard Industrial Classification Code for rubber manufacturing is 3069. The manufacturing plant is approximately 45 years old and processes about 4 million pounds of rubber products a year. The rubber may contain different additives to give different physical properties. The discharge from the factory consists of storm water and both contact water and non-contact cooling water. Contact water and non-contact cooling water are used to control temperature in the manufacturing of rubber parts.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

The effluent limits for outfall 002 are different from the previous permit. The effluent limits for outfall 002 are based on rubber manufacturing point source categorical standards. The categorical standards are mass limits based on the production rate. WMRE indicated that the production of rubber product will be approximately four million pounds per year, which is an increase from the previous permit. The change in the production rate will change the categorical subpart from a small-sized to a medium size plant. The medium-size plant categorical standards are found in 40 Code of Federal Regulations 428.62.

DISCHARGE

DESCRIPTION OF DISCHARGE

The plant uses water to maintain constant temperatures (usually warmer than ambient to increase the malleable characteristics of rubber) while manufacturing rubber parts. Some rubber parts are heated with the intent to cure, in pressurized autoclaves with steam (contact water) during which some of the steam condenses and is discharged. After the curing process is completed, contact

water is used to cool the rubber parts in the autoclave before it is opened. Non-contact water flows through jackets enveloping processes (warming rubber) while shaping it in presses, extruders, and mills. About 3,000 – 8,000 gallons per day used in the autoclaves flows through the discharge point. The non-contact process water portion of the flow is approximately 100,000 gpd. All discharges from the plant are to the on-site storm water collection system that circles around and drains the outside yard and then flows under the covered factory part of the plant.

The on-site storm drain system connects to the City storm drain on the west side of the plant (the front of the plant just off 700 West) where the flow leaves the property. There is a manhole at this point labeled outfall 001. This is considered the discharge point for the plant and it is where secondary standards must be applied (Outfall 001). A second sampling point (called Outfall 002 even though it is an intermediate discharge, upstream from outfall 001) is in the interior of the plant and consists of the water condensed from the autoclave. Categorical standards from 40 Code of Federal Regulations 428.62 apply at this discharge.

<u>Outfall</u>	<u>Description of Discharge Point</u>
001	Discharge point is located in the west parking lot at latitude 40°41'48" and longitude 111°54'30".
002	Floor drain discharge point located inside the facility near the autoclaves. The discharge is composed mainly of process water, condensed from the autoclaves where steam is used under pressure to cure rubber parts, and cooling water.

RECEIVING WATERS AND STREAM CLASSIFICATION

The final discharge flows into a South Salt Lake City Storm Drain, which flows into Mill Creek, which flows into the Jordan River. Mill Creek from the confluence of the Jordan River to Interstate 15 is classified as 2B, 3C, and 4. The Jordan River from North Temple to the confluence with Little Cottonwood Creek is classified as 2B, 3B, 3C and 4 according to Utah Administrative Code (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 3B	-Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.
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.

BASIS FOR EFFLUENT LIMITATIONS

Limitations on total suspended solids (TSS) and BOD₅ at Outfall 001 are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. The Oil and Grease (O&G) limit is based on best professional judgment and is the same as in the previous permit. No flow limits were placed in Outfall 001 because all of the parameters are based on secondary treatment standards. Flow will be monitored to ensure that the WLA flow basis is not exceeded.

Limitations at Outfall 002 are based on applicable technology standards for the Rubber Manufacturing Point Source Category, 40 CFR 428.62, which is for small-sized plants. A medium sized rubber plant processes between 8,200 lbs/day (2.95 million lbs/yr, operating 360

days/yr) and 23,000 lbs/day (8.28 million lbs/year, operating 360 days/yr) of raw materials. WMRE currently operates at 11,100 lbs/day.

The priority pollutant scan that was completed by WMRE shows very low concentration for all pollutants. The discharge from the facility with such a high dilution factor with the receiving water has a very low potential of causing a violation of water quality standards.

Outfall 001

Parameter	Effluent Limitations a/			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
BOD ₅ , mg/L	25	35	NA	NA
TSS, mg/L	25	35	NA	NA
Oil & Grease, mg/L	NA	NA	NA	10
pH, Standard Units	NA	NA	6.5	9

Outfall 002

Parameter	Effluent Limitations a/	
	Daily Maximum	Monthly Average
Oil & Grease, lbs/day	4.66	1.66
TSS, lbs/day	8.88	4.44

NA – Not Applicable.

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are the same as in the previous. The reporting requirements will be submitted on Discharge Monitoring Report Form (EPA No. 3320-1) or by NetDMR, post-marked or entered into NetDMR no later than the 28th day of the month following the completed reporting period.

Outfall 001

Self-Monitoring and Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Total Flow b/ c/	Weekly	Instantaneous	gpd
Temperature	Weekly	Grab	° F
BOD ₅	Monthly	Grab	mg/L
TSS	Monthly	Grab	mg/L
Total Lead	Yearly	Grab	mg/L
Oil & Grease	Monthly	Grab	mg/L
pH	Monthly	Grab	SU

Outfall 002

Self-Monitoring and Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Total Flow b/ c/	Weekly	Recorder	gpd
TSS	Monthly	Grab	mg/L
Oil & Grease	Monthly	Grab	mg/L

NA – Not Applicable

WASTE LOAD ANALYSIS AND ANTIDegradation REVIEW

Effluent limitations may also be derived using a Wasteload Analysis (WLA). The WLA incorporated Secondary Treatment Standards, Water Quality Standards, Antidegradation Reviews (ADR), as appropriate 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 the UPDES renewal development, a WLA and ADR were performed. An ADR Level I review was performed and concluded that an ADR Level II review was not required. The WLA indicates that the effluent limitations should be sufficiently protective of water quality, in order to meet State water quality standards in the receiving waters.

STORMWATER REQUIREMENTS

WMRE is currently covered under a separate UPDES Multi Sector General Permit for Industrial Activities, permit number UTR266797.

BIOMONITORING REQUIREMENTS

As part of a nationwide effort to control toxic discharges, biomonitoring requirements are being included in permits for facilities where effluent toxicity is an existing or potential concern. In Utah, this is done in accordance with the *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity (WET) Control (Biomonitoring (2/1991))*. Authority to require effluent biomonitoring is provided in *UAC R317-8, Utah Pollutant Discharge Elimination System* and *UAC R317-2, Water Quality Standards*.

The permittee is minor industrial facility that discharges storm water and cooling water from the manufacturing process, in which toxicity has not been present as previous WET testing has indicated. Since the facility has not changed their processes since the initial WET tests, the potential for toxicity in their discharge remains minimal. 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 by Matthew Garn
Utah Division of Water Quality

May 27, 2014

PUBLIC NOTICE

Began:

Ended:

Public Noticed in The Salt Lake Tribune and Deseret News

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PUBLIC NOTICE DRAFT

