

TEXARKANA ALUMINUM

WATER DISCHARGE MANAGEMENT SUMMARY

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Texarkana Aluminum – Nash, Texas Facility – Discharges to Water

- Texarkana Water Utilities (TWU): Industrial Wastewater Discharge Permit No CS-03012016-02-03a1
- Texas Commission on Environmental Quality (TCEQ) – TPDES – No wastewater discharges subject to TPDES regulations.

Our Commitment

Texarkana Aluminum is committed to protecting water resources through responsible water discharge management practices that align with ISO 14001 environmental management principles. We recognize that aluminum manufacturing operations have the potential to impact surface water, groundwater, and municipal treatment systems if not properly controlled, and we are dedicated to preventing pollution through disciplined operational practices, regulatory compliance, and continual improvement. We will manage water discharges from production, cooling, maintenance, stormwater, and wastewater systems through effective treatment, monitoring, preventive maintenance, and spill prevention measures designed to minimize environmental impact. Our commitment includes meeting or exceeding applicable legal and permit requirements, reducing contaminants at the source, maintaining preparedness for abnormal events, and promoting efficient water use throughout our operations. Through employee training, leadership accountability, regular performance evaluation, and ongoing investment in improved technologies and processes, we strive to protect local ecosystems, conserve water resources, and strengthen the environmental sustainability of our facility for employees, communities, and future generations.

Facility Overview

Texarkana Aluminum produces aluminum coils from aluminum ingots supplied by both internal production and external sources. The aluminum ingots are rolled through both hot and cold rolling processes and further finished through leveling and slitting processes.

The facility is regulated under the Aluminum Forming Point Source Category 40 CFR 467, Subpart B, Rolling with Emulsions Subcategory, Core and Direct Chill Casting Contact Cooling Water.

Water discharges to Texarkana Water Utilities include Casthouse cooling water, Hot Mill contact cooling water, non-contact cooling water, wash water, and sanitary water as detailed below:

Casthouse Cooling Water: Wastewater is generated by direct contact with hot ingots in the casting pits. The wastewater contains metals and oils that are removed in the DAF unit using polymers. After treatment, the temperature of the water is lowered in the Casthouse cooling tower and the water is recirculated back to the Casthouse. This direct contact cooling water is discharged to Texarkana Water Utilities through Outfall 001 as needed to control the concentration of total dissolved solids (TDS).

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Chemicals Added
Vertex CSS-12 (Sodium hypochlorite 12.5%)
Sodium bicarbonate
Chemtreat CL41 (40% Sodium bromide)
Chemtreat S107 Polymer
Chemtreat P8318E Polymer
Chemtreat UC3004
Chemtreat P817E Polymer

Hot Mill Contact Cooling Water: Wastewater is generated by direct contact with the sheet ingot as it is hot rolled in the Hot Rolling Mill. The lubricant/coolant used is an oil-water emulsion containing approximately 5% oil. This process water is filtered after use and reused until the contaminant level, typically hydraulic fluid, reaches a level that it must be discharged to the wastewater plant for treatment. The treatment consists of a mixing tank where polymers are used to separate the oil from the water. The water is recycled back to the finishing tower and the oily sludge is shipped to an off-site treatment facility for processing.

Chemicals Added
Sodium bicarbonate
Chemtreat S155 Polymer
Chemtreat S107 Polymer
Chemtreat P817E Polymer

Non-Contact Cooling Water: Non-contact cooling water is used for heat control in the eight annealing furnaces for Cold Rolling Mill 1 and six annealing furnaces for Cold Rolling Mill 2. When necessary, this water is routed through the finishing cooling tower for temperature reduction. This non-contact cooling water can be routed to the Casthouse wastewater treatment system for eventual discharge to Texarkana Water Utilities through Outfall 001 when required for total dissolved solids (TDS) control.

Chemicals Added
Vertex CSS-12 (Sodium hypochlorite 12.5%)
Chemtreat UC3004
Chemtreat CL41 Micro-bicide

Wash Water: A pressure-washing pit generates wastewater from washing mobile equipment and parts. The wastewater is contained and is periodically removed from the pit and shipped off-site for disposal.

Sanitary Water: Sanitary discharge flow from restrooms and breakroom areas commingles into the plant piping and is collected at the Wastewater Outfall 003 on the southeast side of the property along Alumax Road.

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Industrial Wastewater Permit

TCI Texarkana Inc's water management program follows the framework of our Industrial Wastewater Permit No. CS-03012016-02-03a1. All treated process wastewater and cooling tower blow-down wastewater flows to Outfall 001 (*sampling tray in upper region of on-site lift station located at the southwest corner of the pretreatment building*) equipped with an ISCO 4350 flowmeter to determine the discharge volume on a continuous basis.

Parameter (Outfall # 001)			Units	Sample	
	Maximum lbs/day	Average lbs		Frequency	Type
Chromium (T)	0.511	0.209	lbs/day	2 per semi-annual	Composite
Cyanide (T)	0.281	0.115	lbs/day	2 per semi-annual	Single Grab
Zinc (T)	1.418	0.584	lbs/day	2 per semi-annual	Composite
Oil and Grease (T) HEM	13.86	13.86	lbs/day	2 per semi-annual	Single Grab

Discharge wastewater representative of all wastes generated and discharged from the facility to the Texarkana Water Utilities sewer system are monitored at Outfall 003 (*manhole located at the SE corner of the East Casting House between fence and Alumax Road, next to concrete pad*) The following semi-annual testing is required for Outfall 003:

Parameter (Outfall # 003)	Maximum	Units	Sample	
			Frequency	Type
Ammonia	250.00	mg/L	1 per semi-annual	Composite
Arsenic (T)	0.201	mg/L	1 per semi-annual	Composite
CBOD	1500.00	mg/L	1 per semi-annual	Composite
Cadmium (T)	0.105	mg/L	1 per semi-annual	Composite
COD	3750.00	mg/L	1 per semi-annual	Composite
Copper (T)	1.547	mg/L	1 per semi-annual	Composite
Lead (T)	0.842	mg/L	1 per semi-annual	Composite

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Mercury (T)	0.0678	mg/L	1 per semi-annual	Composite
Molybdenum (T)	0.821	mg/L	1 per semi-annual	Composite
Nickel (T)	2.057	mg/L	1 per semi-annual	Composite
Phenol (T)	50.00	mg/L	1 per semi-annual	Single Grab
TSS	1500.00	mg/L	1 per semi-annual	Composite
Selenium (T)	0.143	mg/L	1 per semi-annual	Composite
Silver (T)	0.315	mg/L	1 per semi-annual	Composite
pH	≤ 10.5	S.U.	1 per semi-annual	Single Grab
Temperature	65	°C	1 per semi-annual	Single Grab

Any changes to the wastewater discharge must first be approved by the Texarkana Water Utilities.

Permit and System Monitoring

The following tasks are performed to minimize risks associated with discharges with water and implement corrective action as soon as possible when issues are identified.

- Flow: Daily flow monitoring is required
- Semi-annual Composite/Grab Sampling: Sampling parameters required include Chromium, Cyanide, Zinc, Oil & Grease, Ammonia, Arsenic, Cadmium, Carbonaceous BOD, Copper, Lead, Mercury, Molybdenum, Nickel, Phenol, Total Suspended Solids, Selenium, and Silver
- Daily Wastewater System Monitoring and Operations: performed by ChemTreat, with representative onsite Monday-Friday
- Flowmeter: Annual calibration and maintenance by CC Lynch

Emergency Preparedness

Texarkana Aluminum maintains and implements a comprehensive Emergency Preparedness and Response program to prevent, control, and mitigate actual or potential wastewater discharges, stormwater contamination events, and oil or chemical releases that could impact sanitary sewer systems, surface water, groundwater, or soil. This program is designed in alignment with ISO 14001 environmental management principles and integrates with the facility's Stormwater Pollution

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Prevention Plan (SWPPP), Spill Prevention, Control, and Countermeasure (SPCC) Plan, site emergency procedures, and applicable regulatory obligations.

**All plans are available on request*

Accountability and Transparency

Environmental responsibility is integrated into our operations through leadership oversight, employee training, operational controls, and management review. We are committed to:

- Meeting or exceeding applicable legal requirements
- Preventing pollution
- Reducing environmental impact
- Supporting responsible manufacturing
- Maintaining open communication regarding our environmental management approach

Looking Ahead

As part of our long-term commitment to environmental stewardship and responsible manufacturing, our facility will continue advancing water discharge management practices to reduce environmental impact, strengthen compliance, and improve operational sustainability. We recognize that effective water management is an evolving responsibility that requires ongoing evaluation, innovation, and investment.