

**Spanish Fork City  
Pretreatment Program  
Local Limit  
Development Document**

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## INTRODUCTION

Spanish Fork City UPDES permit requires local limits to be evaluated. The receiving water class change to a 3 E , man made drainage canal, water quality standards were changed and Local Limits were technically reviewed to show the changes to said limits.

## LEGAL AUTHORITY

United States Code of Federal Regulations 40 CFR 403.5.

Spanish Fork City Ord. 13.32.010

## DEVELOPMENT BACKGROUND

### Water Quality Standard

Waste load analyses DWQ of Utah

### Sludge Disposal Criteria

Land application / composting

### Treatment Plant Removal Efficiencies and Sampling Criteria

Actual data collected quarterly at the Wastewater Plant influent, effluent, and biosolids.

### Sampling Plan:

Sampling plan was mandated by the UPEDS permit UT 002010

### Removal Efficiencies:

Efficiencies were determined from actual data obtained from sampling or from EPA Guidance Manuals.

### Flow :

Flow was gathered from records kept of the influent and effluent flows.

## PRIORITY POLLUTANT ANALYSIS

The facility should include the pollutants of concern that were evaluated at a minimum the following should be evaluated:

Arsenic	Mercury	5- Day Biochemical Oxygen
Cadmium	Molybdenum	Demand
Chromium	Nickel	Total Suspended Solids
Copper	Selenium	Ammonia
Cyanide	Silver	pH
Lead	Zinc	Others as needed

Listed below are the pollutants and their maximum allowable headwork load (MAHL). Detailed information on the development can be found in the supporting documents.

## LOCAL LIMITS FOR SPANISH FORK, UT

### PRIORITY POLLUTANT ANALYSIS

At the present time there are three categorical industrial users in the pretreatment program. New MAIL's have been developed and are presented in Table 1 below. The limits were developed using an EPA approved spreadsheet calculation (Attachment 1).

Table 1

Pollutant	Maximum for any 1 day (mg/l)	30 Day Average Shall Not Exceed (mg/l)
Aluminum (T)	0.00	0.00
Arsenic (T)	3.40	1.70
Cadmium (T)	8.40	4.20
Chromium (T)	4.10	2.05
Copper (T)	2.10	1.05
Lead (T)	0.50	0.25
Mercury (T)	0.00	0.0088
Molybdenum (T)	90.40	45.20
Nickel (T)	15.80	7.90
Selenium (T)	0.40	0.20
Silver (T)	0.43	0.43
Zinc (T)	32.00	16.00
Cyanide (T)	0.00	0.00

### COMPATIBLE POLLUTANTS

Compatible pollutant load maximums are based on the design criteria for the POTW. The maximum compatible loads are:

<u>Pollutant</u>	<u>Maximum Allowable Load (lbs/day)</u>
BOD <sub>5</sub>	9,007
TSS	9,007

Attachment 1, Pages 1-3 shows the total flows to the POTW of approximately 4.1 MGD, of which 0.009 MGD is industrial flow. The sheets present the calculation of the Local Limits. Attachment 2, Pages 1-4 present the analytical data used for the calculations in Attachment 1.

### **Non-Petroleum Oil and Grease Limitation**

This section evaluates a limit for non-petroleum oil and grease. Petroleum-based oil and grease are prohibited in accordance with 40 CFR 403.5(b)(6). Throughout the remainder of this section, the term “oil and grease” refers to only non-petroleum based products. The typical wastewater treatment plant treating most domestic wastewater will reliably remove at least 90% of all oil and grease entering the system. The NPDES Permit for the City has for a daily maximum for oil and grease discharge of 10 mg/l. The maximum concentration allowed at an Industrial User discharge point will be 100 mg/l.

### **LOCAL LIMITS – EFFECT ON INDUSTRY**

**There will be no effect on Industries currently permitted.**

**All supporting data can be reviewed at the Spanish Fork Wastewater Treatment Facility  
Located at 2160 N 150 E, any questions or coments can be made at 8001-804-4466.  
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