

Utah State Implementation Plan

Emission Limits and Operating Practices

Section IX, Part H

Proposed:
Adopted by the Air Quality Board
December 2, 2020

i. Kennecott Utah Copper (KUC): Power Plant

i. Utah Power Plant

A. The following requirements are applicable to Unit #4:

- I. Only natural gas shall only be used as a fuel, unless the supplier or transporter of natural gas imposes a curtailment. Unit #4 may then burn coal, only for the duration of the curtailment plus sufficient time to empty the coal bins following the curtailment. The Director shall be notified of the curtailment within 48 hours of when it begins and within 48 hours of when it ends.
- II. Emissions to the atmosphere when burning natural gas shall not exceed the following rates and concentrations:

Pollutant	grains/dscf 68°F. 29.92 in Hg	ppmdv 3% O ₂	lbs/hr	lbs/MMBtu	[lbs/event]
1. PM _{2.5} :					
Filterable	0.004				
Filterable + condensable	0.03				
2. NO _x :		30	32	0.04	
[Startup / Shutdown					395

~~III. Startup / Shutdown Limitations:~~

- ~~1. The total number of startups and shutdowns together shall not exceed 690 per calendar year.~~
- ~~2. The NO_x emissions shall not exceed 395 lbs from each startup/shutdown event, which shall be determined using manufacturer data.~~

~~3. Definitions:~~

- ~~(i) Startup cycle duration ends when the unit achieves half of the design electrical generation capacity.~~
- ~~(ii) Shutdown duration cycle begins with the initiation of boiler shutdown and ends when fuel flow to the boiler is discontinued.]~~

B. Upon commencement of operation of Unit #4, stack testing to demonstrate compliance with each emission limitation in IX.H.12.j.i.A and IX.H.12.j.i.B shall be performed as follows:

* Initial compliance testing for the Unit 4 boiler is required. Initial testing shall be performed when burning natural gas. The initial test shall be performed within 60 days after achieving the maximum heat input capacity production rate at which the affected facility will be operated and in no case later than 180 days after the initial

startup of a new emission source.

The limited use of natural gas during maintenance firings and break-in firings does not constitute operation and does not require stack testing.

Pollutant	Test Frequency
I. PM _{2.5}	every year
II. NO _x	every year

C. Unit #5 (combined cycle, natural gas-fired combustion turbine) shall not exceed the following emission rates to the atmosphere:

Pollutant	lbs/hr	lbs/event	ppmdv (15% O ₂ dry)
I. PM _{2.5} with duct firing: Filterable + condensable	18.8		
II. VOC:			2.0[*]
III. NO _x : {Startup / Shutdown	395		2.0[*]

~~* Except during startup and shutdown.~~

~~IV. Startup / Shutdown Limitations:~~

~~1. The total number of startups and shutdowns together shall not exceed 690 per calendar year.~~

~~2. The NO_x emissions shall not exceed 395 lbs from each startup/shutdown event, which shall be determined using manufacturer data.~~

~~3. Definitions:~~

~~(i) Startup cycle duration ends when the unit achieves half of the design electrical generation capacity.~~

~~(ii) Shutdown duration cycle begins with the initiation of boiler shutdown and ends when fuel flow to the boiler is discontinued.]~~

D: Upon commencement of operation of Unit #5*, stack testing to demonstrate compliance with the emission limitations in IX.H.12.m.i.B shall be performed as follows for the following air contaminants

* Initial compliance testing for the natural gas turbine and duct burner is required. The initial test shall be performed within 60 days after achieving the maximum heat input capacity production rate at which the affected facility will be operated and in no case later than 180 days after the initial startup of a new emission source.

The limited use of natural gas during maintenance firings and break-in firings does not constitute operation and does not require stack testing.

Pollutant	Test Frequency
I. PM _{2.5}	every year
II. NO _x	every year
III. VOC	every year

