



South Carolina Department of Health and Environmental Control

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# Westinghouse Electric Company, LLC

Draft Air Quality State Operating Permit Renewal

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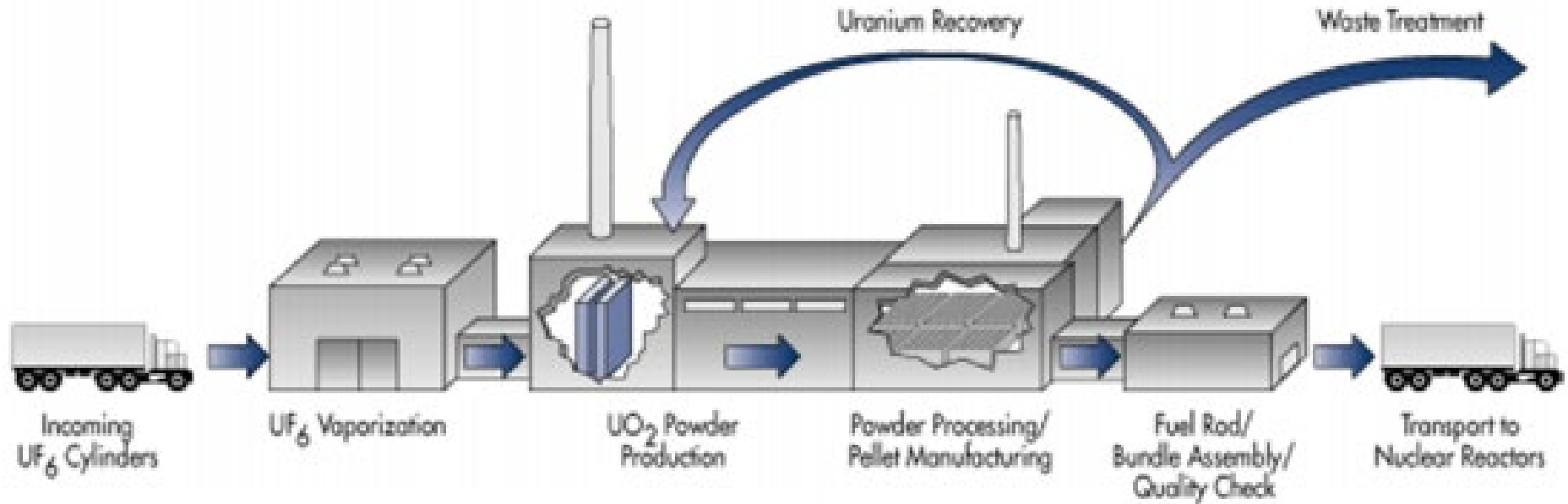
June 6, 2023

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BAQ, Air Permitting Division

# Introduction

- Westinghouse Electric Company LLC
- Permitting Action
  - Air Quality State Operating Permit Renewal (minor source)
- Current Requirements
  - Previous State Operating Permit; issued March 2008
  - Minor Construction Permits CC and CD

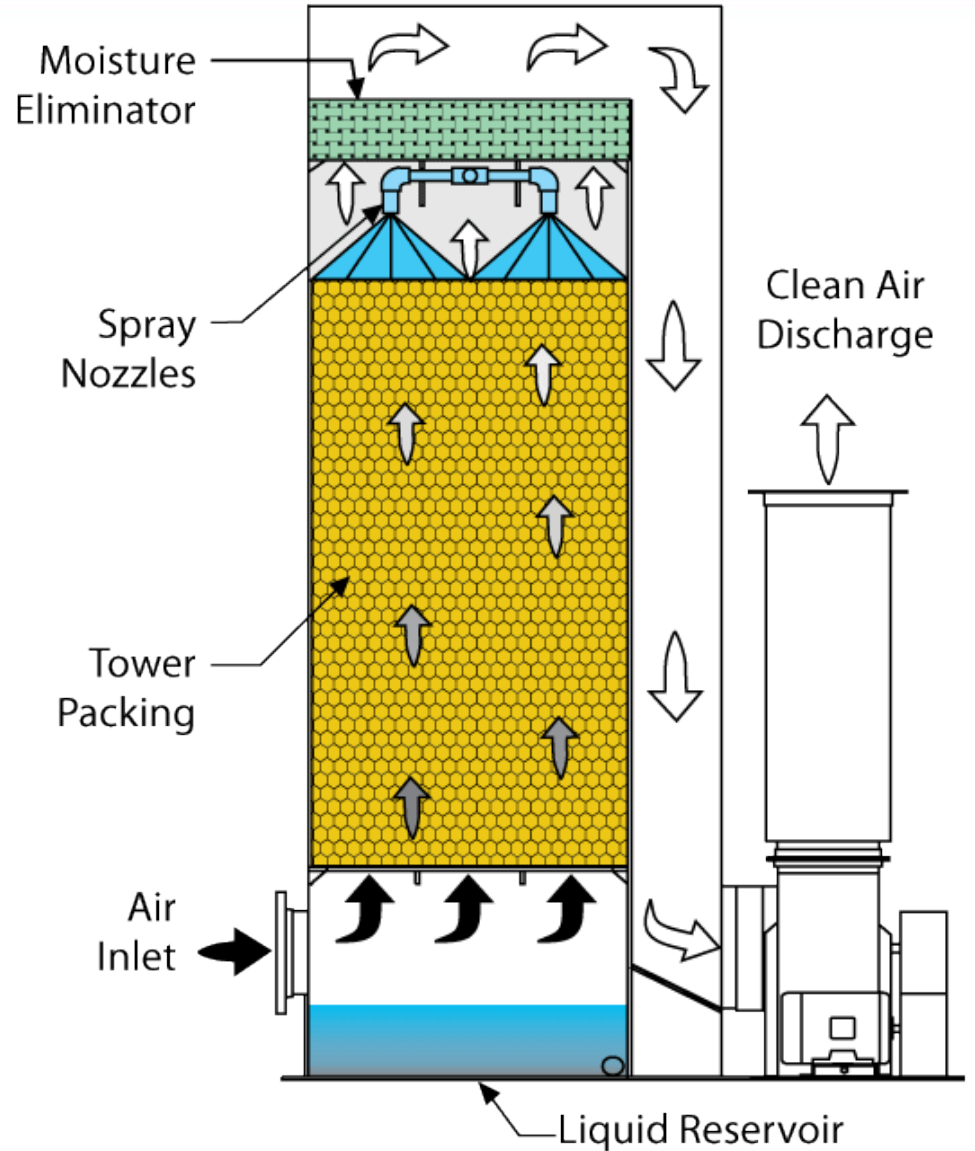
# Facility Overview



# Air Pollutant Emissions

- Boilers (fuel combustion)
- Uranium processing (chemical conversion)
- Mechanical assembly (metal working)
- Incineration (combustion)

# Scrubbers



# Changes Since Previous Notice

- Replaced old boilers
- Plating operations ceased
- Replacement of perchloroethylene with dodecane
- Drum processing

# Drum Processing

- Remainder of wet combustible material that contains tetrachloroethylene (perc)
  - 522 drums
- Solvent extraction to below 500ppm
- Emissions below exemption and de minimis levels
- Exemption letter sent September 15, 2022

# Technical Review

- Potential (worst case) air emissions
  - Recent stack test results
  - Published emission factors
- Conservatism factors of 200 – 500%
- Compared with health protective state and federal air quality standards
- Radionuclides regulated by NRC



# Air Quality Analysis

Air Pollutant	Max Predicted Concentration ( $\mu\text{g}/\text{m}^3$ )	State/Federal Standard ( $\mu\text{g}/\text{m}^3$ )	% of Std
Nitrogen Dioxide ( $\text{NO}_2$ )	156 (1-hr) 10 (Annual)	188 (1-hr) 100 (Annual)	83 10
Hydrochloric Acid (HCl)	0.19	175.00	< 1
Hydrofluoric Acid (HF)	0.18	2.05	9
Mercury (Hg)	< 0.00	0.25	< 1
Nickel (Ni)	< 0.00	0.50	< 1
Nitric Acid ( $\text{HNO}_3$ )	1.31	125.00	1
Phosphorus (P)	0.01	0.50	2
Cadmium (Cd)	< 0.00	0.25	< 1

# Risk Management Plan (112r)

- Aqueous Ammonia
- Risk Management Plan has been developed and submitted
  - Plan has been coordinated with local responders
- Any revisions or corrections must be sent to the EPA and DHEC

# Permit Enhancements

- Detailed equipment listing
- Scrubber monitoring
- Operation & maintenance checks
- Source (stack) testing

Unit(s)	Pollutants
Uranium Process Scrubbers	HF, NO <sub>x</sub> , HNO <sub>3</sub>
Incinerator	PM, SO <sub>2</sub> , NO <sub>x</sub> , CO, VOC

- Incinerator conditions

# CONTACT US

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