



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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# Introduction

- Facility Name:
  - Westinghouse Electric Company, LLC
- Facility Site Name:
  - Columbia Fuel Fabrication Facility (CFFF)
- Permitting Action:
  - Air Quality State Operating Permit Renewal (minor source)

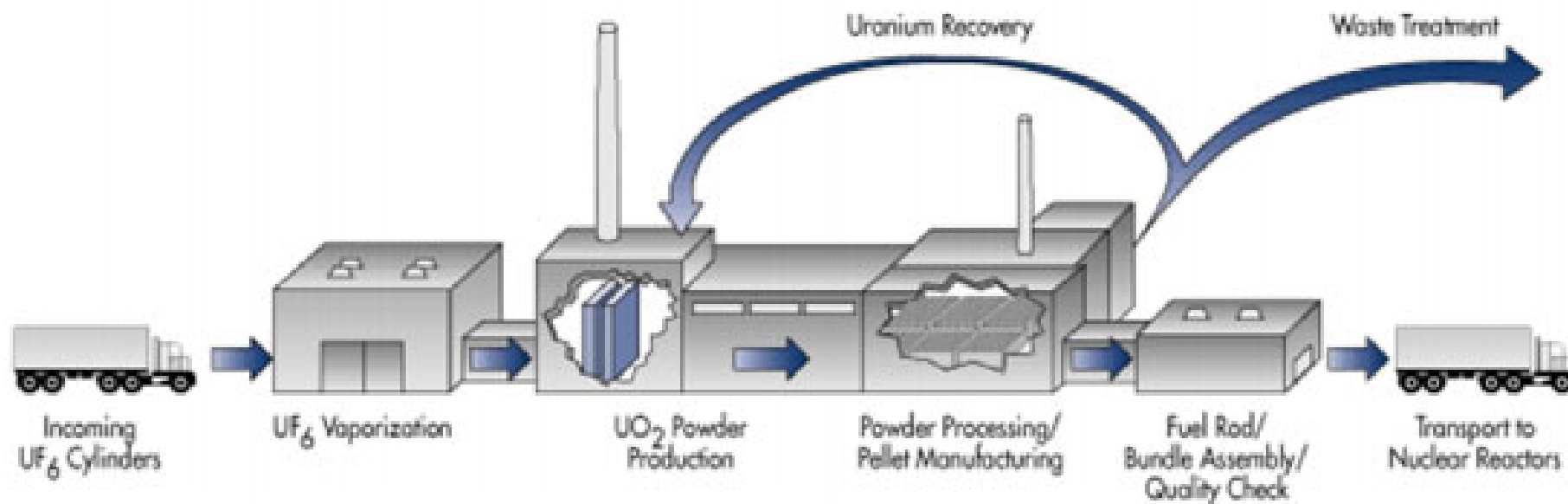


# Introduction

- Previous operating permit issued 3/5/08
- Draft permit:
  - More detailed equipment listing
  - Updated monitoring and testing requirements
- If approved, new operating permit expires in 10 years



# Facility Overview

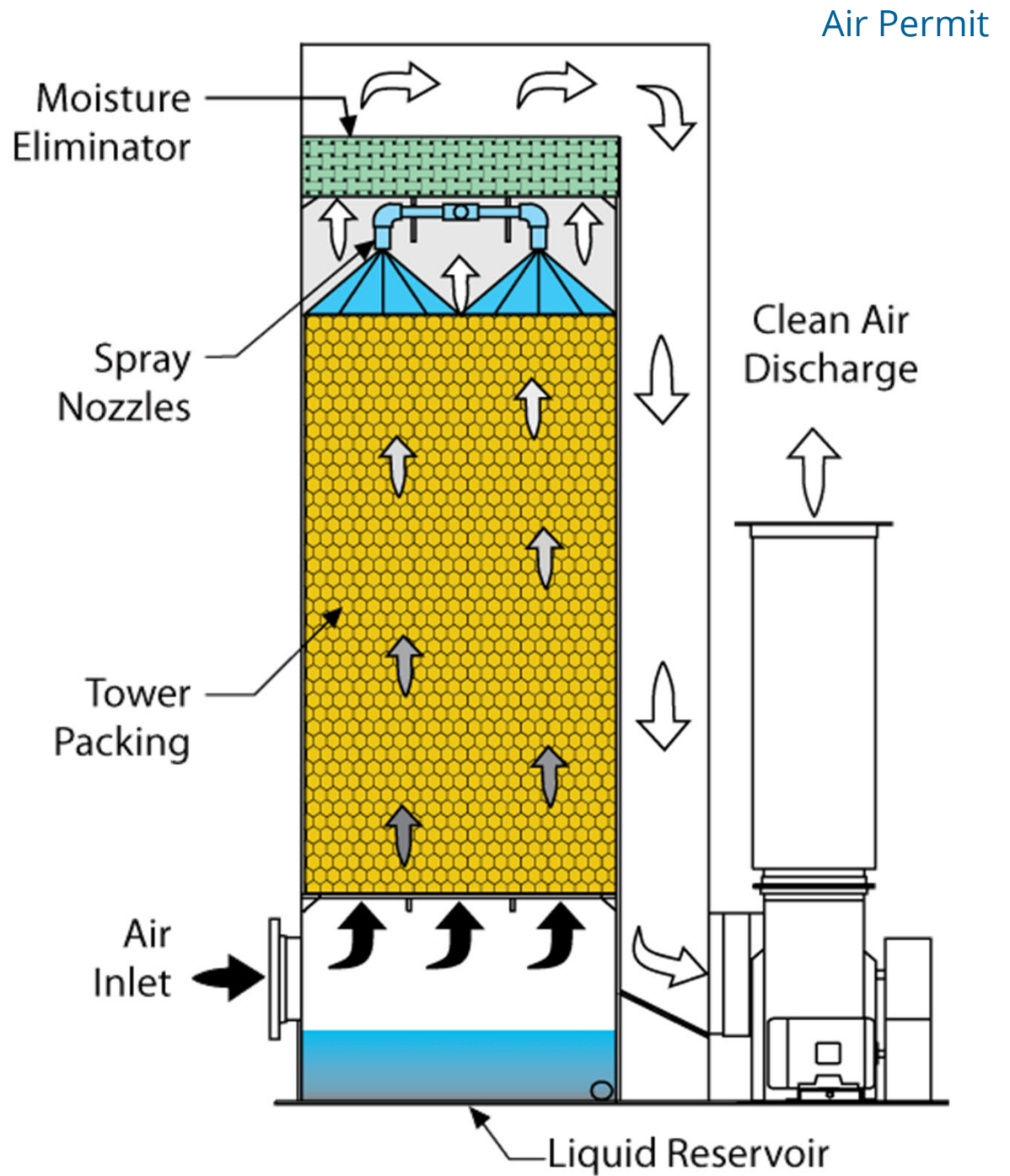




# Air Pollutant Emissions

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

# Scrubbers





# Technical Review

- Potential (worst case) air emissions were updated using recent stack test results
- Safety factors of 200 – 500%
- Compared with health protective state and federal air quality standards
- Radionuclides regulated by NRC, not DHEC



# 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
Beryllium (Be)	< 0.00	0.01	< 1





# Updated Permit

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

Unit(s)	Pollutants
Uranium Process Scrubbers	HF, NO <sub>x</sub> , HNO <sub>3</sub>
Plating Scrubber	HF, HNO <sub>3</sub> , HCl, H <sub>2</sub> SO <sub>4</sub> , Ni, Cd, P
Incinerator	PM, SO <sub>2</sub> , NO <sub>x</sub> , CO, VOC

- Incinerator conditions



# Notifications to DHEC

- Malfunctions/Failure/Process Upsets lasting more than 1-hour, greater emissions
  - Facility must notify DHEC regional office within 24 hours
  - 30-day Follow-up report
  - Evaluated for referral to enforcement



# 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 have to be sent to the EPA and DHEC



# Draft Air Permit Renewal

- Comment period
  - Opened September 12<sup>th</sup>
  - Closes 5pm on October 11<sup>th</sup>
- Comment submittal:
  - Via mail or
  - Via email at [AirPNComments@dhec.sc.gov](mailto:AirPNComments@dhec.sc.gov)
- More Westinghouse information:
  - [www.scdhec.gov/Westinghouse/](http://www.scdhec.gov/Westinghouse/)



# CONTACT US

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