

South Carolina Department of Health and Environmental Control

New-Indy Catawba LLC - Catawba, SC Mill

Public Hearing

June 13, 2024

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Acronyms used in the presentation

- EPA U.S. Environmental Protection Agency
- DHEC S.C. Department of Health and Environmental Control
- H₂S Hydrogen Sulfide
- PM Particulate Matter
- PM₁₀ Particulate Matter less than 10 microns
- PM_{2.5} Particulate Matter less than 2.5 microns
- Tpy Tons per year



Acronyms used in the presentation, continued

- LVHC low volume, high concentration
- TRS total reduced sulfur
- SRL stripper rectified liquid
- NO_X oxides of nitrogen
- SO₂ sulfur dioxide
- CO carbon monoxide
- ppm parts per million



New-Indy has applied for three construction permits to:

- Incorporate limits and requirements from Environmental Protection Agency's (EPA) consent decree
- Install and operate a new ash handling system
- Install a new foul condensate stripper and associated equipment as required by SC DHEC's consent order



Draft Construction Permit CP-50000051

- Operation of the stripper
- Limits hours the stripper is down
- Chemically treat the unstripped foul condensate
- Continuous H₂S fence-line monitors
- Wastewater Treatment System
- Post Aeration Tank cover and filter system
- Containment system for black liquor overflows



Draft Construction Permit CP-50000175

- New dry ash handling system
- Part of discontinuing addition of solids to the clarifier
- Synthetic minor construction permit that limits
 - PM less than 25 tpy
 - PM₁₀ less than 15 tpy
 - PM_{2.5} less than 10 tpy
- Required monitoring, recordkeeping, reporting



Draft Construction Permit CP-50000061

- New low-pressure steam, foul condensate stripper system
- No. 3 Recovery Furnace modification
- Existing condensate stripper as backup to new stripper system
- Changes to foul condensate treatment scenarios



Foul condensates will be treated by one of the following scenarios:

- New stripper system
- Backup (existing) stripper
- Chemical treatment when no stripper online

The foul condensates will be controlled at all times using one of these treatment scenarios



New low-pressure (LP) Foul Condensate Stripper System includes:

- Low-pressure Steam Stripper
- Condenser
- Stripper feed tank
- Stripper rectified liquid (SRL) storage tank



- Designed to process all pulping process condensates (foul condensate)
- Stripper rectified liquid (SRL) condenser
- SRL combusted
- Combustion of gases
- Cleaned condensate



Backup (existing) stripper

- Operates when the new stripper is not operational
- Gases combusted in Combination Boilers
- Two operating modes:
 - Methanol Mode
 - TRS Mode



Backup Stripper – Methanol Mode

- Current, required mode of operation
- Treatment of the foul condensates
- Stripped gases combusted in the Boilers
- Cleaned condensate



Backup Stripper – TRS Mode

- TRS removal; partial Methanol removal
- Remaining methanol treated in the aeration stabilization basin
- Stripped gases combusted in the Boilers



No Stripper online

- Operation without a stripper is limited
- Chemically treat the foul condensate



Emission changes

- Decrease in actual H₂S, TRS, NOx, and SO₂ emissions
- Increase in lead, particulate matter, and CO emissions



Correction to Draft Construction Permit CP-5000061

- Condition B.17 contains the TRS limit assigned by Standard No. 4 for the No. 2 Recovery Furnace. The draft construction permit references 5 parts per million (ppm). The No. 2 Recovery Furnace is an old design furnace and the correct limit is 20 ppm. This limit is straight from the regulation and is not determined on a case-by-case basis.
- The correct limit is in the statement of basis. The limit will be corrected in the construction permit.



Comments and Presentation

- Verbal comments at tonight's public hearing
- ePermitting Portal (preferred)
 https://epermweb.dhec.sc.gov/ncore/external/publicnotice/search
 Site: New-Indy Catawba LLC
- Email <u>AirPNComments@dhec.sc.gov</u>
- US Mail
 Attn: Bureau of Air Quality, Air Permitting Division, 2600 Bull Street,
 Columbia, SC 29201
- DHEC's New-Indy Webpage: https://scdhec.gov/NewIndy
 This presentation will be available in the next couple days