



NYCDOC ISLAND JAIL COMPLEX TITLE V PERMIT RENEWAL & MODIFICATION APPLICATION: VIRTUAL PUBLIC INFORMATION SESSION

June 22, 2023 6 – 9 PM

WELCOME & INTRODUCTIONS



NYCDOC – Project Sponsor and Permit Applicant

- Michael Leonard, Director, Facility Maintenance & Repair Division
- Christopher Clarke, Sr. Stationary Engineer/ Project Liaison
- Hardee Saini, Executive Director of Design, Engineering & Energy Management
- Susan Yang, Energy Project Manager, Engineering & Energy Management



AKRF, Inc. - Preparing Title V Permit Application & SEQRA Documentation, Assisting with Public/Stakeholder Outreach

- Henry Kearney, PE, SVP, Air Quality Department Head & Air Permitting Lead
- Stephen Holley, SVP, CP-29 Compliance/Public Outreach Lead

YOUR INPUT IS IMPORTANT

At today's Virtual Public Information Session:



- Attendees will have the opportunity to ask questions of the Project Team
- All questions provided during the Virtual Public Information Session or submitted prior to the deadline will be given the same consideration and answered in writing
- Methods to submit questions after the Virtual Public Information
 Session are listed at the end of this presentation and posted on the
 Project Website

PURPOSE OF INFORMATION SESSION

- New York City Department of Correction (NYCDOC) is seeking a New York State Department of Environmental Conservation (NYSDEC) Title V permit renewal and modification to set new nitrogen oxide (NOx) limits for the Island Jail Complex
- This meeting is an opportunity for the public to learn about the project and the permit modification and permitting process
- There will be time at the end of this presentation to ask questions and to comment on the permit renewal and modification application that NYSDEC is considering



ISLAND JAIL COMPLEX LAYOUT

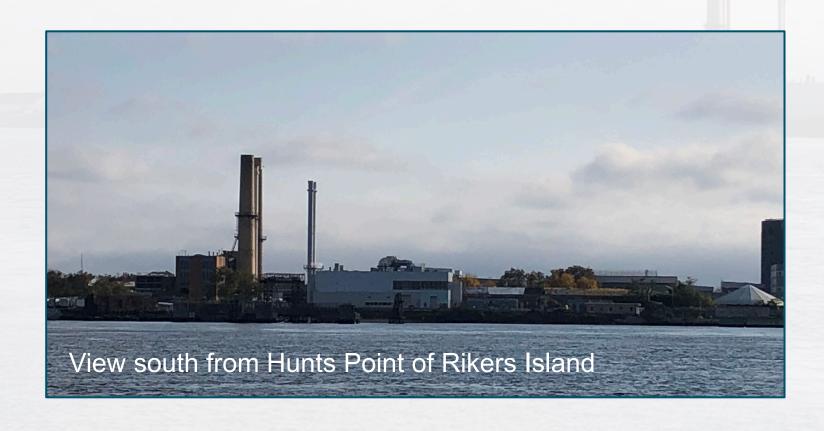
Project Location

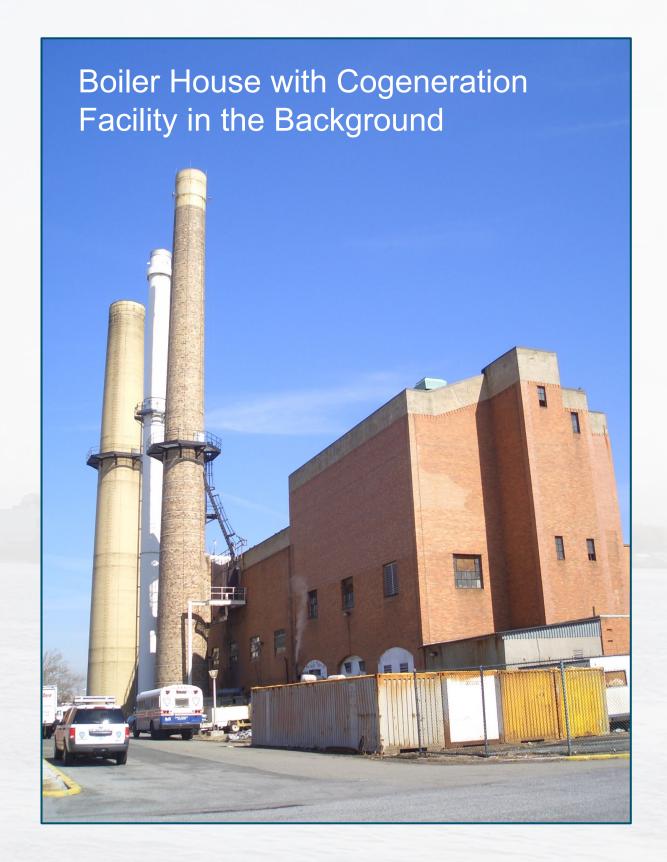
- The figure shows the layout of the buildings on Rikers Island.
- The red star and brown rectangle show the approximate location of the cogeneration facility and boiler house equipment, respectively, which are subject to the NYSDEC Permit
- The blue dots show the approximate locations of the Demand Response Program engines subject to the NYSDEC Permit



BOILER HOUSE & COGENERATION FACILITY

- Two 7.5 megawatt (MW) natural gasfired combustion turbines to generate electricity
- Waste heat generated is made into steam, which is more efficient than conventional boilers
- Generates most of the electricity and steam needed to serve Rikers Island





BOILER HOUSE & COGENERATION FACILITY

- In addition to the cogeneration facility, boilers are used during periods of peak steam demand and when the cogeneration facility is undergoing maintenance.
- The boilers operate on natural gas primarily but can operate on fuel oil as a back-up if necessary.
- The current Title V permit conditions contains annual emission limits of NOx and particulate matter (PM10).
- Under the current Title V permit conditions, the boilers cannot be operated as needed to meet the peak steam demand of the Island Jail Complex or when the cogeneration facility undergoes more lengthy maintenance or repairs

DIESEL ENGINES

- NYCDOC also operates diesel engines to provide emergency power to the Island Jail
 Complex's buildings and facilities on Rikers Island in the event of a power outage
- Under the current Title V permit, the diesel engines can also operate during limited periods to provide power to buildings during periods of peak utility demand, known as demand response.

PROPOSED PERMIT MODIFICATIONS

- Modifications will allow the facility to operate the eight existing boilers as needed to meet the Island Jail Complex's steam demands. This will:
 - Formalize operations at the facility;
 - > Ensure that the facility has necessary operating flexibility; and
 - > Operates in compliance with applicable regulations and permit conditions.
- Under Federal and New York State New Source Review (NSR) regulations, the proposed maximum annual NO_x emissions for the cogeneration facility must be "offset" by reductions in NO_x emissions to ensure that the emissions do not contribute to violations of air quality standards for ground-level ozone
 - ➤ NYCDOC must obtain emissions reduction credits (ERCs) at a specified ratio of 1.3 to 1 from a facility in the same ozone transport region*

^{*} The Ozone Transport Region comprises states in the Northeast and Mid-Atlantic, which was created as part of the Clean Air Act Amendments of 1990 to coordinate actions to control and reduce the transport of ground-level ozone.

PERMIT MODIFICATIONS – COGENERATION FACILITY

Current Permit Conditions:

- ➤ Annual emissions from the cogeneration facility are limited to 42 tons/year of nitrogen oxides (NOx) and 15.77 tons/year of fine particulate matter (PM10).
- NOx emissions from the combustion turbines must not exceed a concentration of 25 parts per million (ppm).

Proposed Permit Conditions:

- Annual NOx emissions from the cogeneration facility would be limited to 52 tons/yr.
- NOx emissions limits from the combustion turbines must not exceed a concentration of 12 ppm without duct burner firing; 15 ppm with duct burner firing.
- ➤ A purchase of 67.6 tons of NOx emission reduction credits (ERCs) would be needed. NYCDOC has secured the ERCs, which must be certified by NYSDEC before the Title V permit renewal can be approved.

PERMIT MODIFICATIONS - BOILERS & ENGINES

Current Permit Conditions:

- > Limit annual emissions of NOx and PM10 from boilers
- ➤ Up to 19 diesel engines can operate during limited periods to provide power to buildings during periods of peak utility demand, known as demand response (total potential enrolled capacity was 19,765 kilowatts (kW)

Proposed Permit Conditions:

- Would remove the boiler annual emission limits to formalize the operations and allow operation of the boilers as needed to meet the steam demand of the Island Jail Complex.
- The boilers were originally installed decades ago; they would continue to be used a back-up to the cogeneration facility as they have since the cogeneration facility started operation in 2015.
- ➤ 10 of the 19 existing diesel engines would be permitted to participate in utility-sponsored demand response programs, at a reduced generating capacity, to ensure compliance with the 1-hour NO₂ NAAQS (5,233 kW), a reduction of 73%.

CLIMATE LEADERSHIP & COMMUNITY PROTECTION ACT (CLCPA)

- The Climate Leadership & Community Protection Act (CLCPA) directs state agencies to determine if their decisions are consistent with statewide greenhouse gas (GHG) emission limits.
- With the proposed permit modifications, the Island Jail Complex facility's potential-to-emit GHGs and co-pollutants would increase.
- However, actual emissions of GHGs would be essentially unchanged since the proposed permit modifications would formalize existing operations.
- The Island Jail Complex facility's electricity consumption would not be affected by the proposed permit modifications, so GHG emissions from purchased grid electricity would not change due to the proposed permit modifications.

PROJECT WEBSITE – AVAILABLE INFORMATION

- Project Information available for public review is posted to Project Website
- www.RikersIslandTitleVPermit.com
- Project documents now available for public review, include the following:
 - Draft Public Participation Plan
 - Virtual Project Information Session Notice/Invitation (bilingual English/Spanish)
 - Project Fact Sheet (bilingual English/Spanish)
 - State Environmental Quality Review Act (SEQRA) Environmental Assessment Form (EAF) documents
 - Environmental Justice Analysis
 - CLCPA Analyses and Report
 - > Title V Permit Application
 - > NYSDEC Notice of Complete Application (To Come after Issued by NYSDEC)
 - > Draft Title V Permit (To Come after Issued by NYSDEC)

COMMUNITY OUTREACH – DOCUMENT AVAILABILITY

Document Repository – Project Website

- The Project website is currently the only public document repository proposed for this permitting process.
- The project website is: www.RikersIslandTitleVPermit.com.
- The availability of any additional repositories (if any are established) will be noted on the Project website: <u>RikersIslandTitleVPermit.com</u>, on the "Documents" page.

YOUR INPUT IS IMPORTANT

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Public Input – Today's Virtual Public Information Session
June 22, 2023 (6 to 9 PM)

- Attendees will now have the opportunity to ask questions (the process is explained on the next slide)
- All questions provided during the Virtual Public Information Session or submitted on or prior to July 7th will be given the same consideration
- Methods to submit questions after the Virtual Public Information
 Session are listed on the next slides and posted on the Project Website

COMMUNITY OUTREACH – QUESTION & ANSWER SESSION

How to Participate in this Virtual Public Information Session

- Meeting Attendees signed up in advance to join this meeting
- Meeting Attendees who wish to ask questions or make comments will be called on one at a time by the Meeting Facilitator
- Once called on, you will be unmuted
- Please state your name and any affiliation (agency, community board, local resident, local community organization)
- Each person will have 3 minutes to make comments or ask questions
- The Project Team will answer any questions they can, or they will be answered in writing, and posted on the Project website
- All questions and comments will be recorded, and responses will be included in a Response Document, that will be posted to the Project Website 21 days after the close of the NYSDEC Permit Application Comment Period.

Comments on the Permit Application will be accepted until 30 days after NYSDEC publishes the Notice of Complete Application & Draft Permit Availability.

QUESTIONS & ANSWERS – HOW TO SUBMIT COMMENTS

How to submit questions or comments after this meeting

 After this meeting, if you have questions about this Project, or to submit comments on the Permit Application, please contact either person below:

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For more information, visit the Project Website: www.RikersIslandTitleVPermit.com

Comments on the Permit Application will be accepted until 30 days after NYSDEC publishes the Notice of Complete Application & Draft Permit Availability.