

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

ENVIRONMENTAL PROTECTION

AIR QUALITY, ENERGY AND SUSTAINABILITY

DIVISION OF CLIMATE, CLEAN ENERGY, AND RADIATION PROTECTION

DIVISION OF AIR QUALITY

Greenhouse Gas Monitoring and Reporting

Adopted New Rules: N.J.A.C. 7:27E

Adopted Amendments: N.J.A.C. 7:27-21.2, 21.3, and 21.5; and 7:27A-3.2, 3.5, and 3.10

Proposed: June 21, 2021, at 53 N.J.R 1063(a).

Adopted: April 22, 2022, by Shawn M. LaTourette, Commissioner, Department of Environmental Protection.

Filed: April 22, 2022, R.2022 d.061, **with non-substantial changes** not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 13:1B-3(e), 13:1D-9, 26:2C-1 et seq., and 26:2C-37 et seq., specifically, 26:2C-41.

DEP Docket Number: 06-21-05.

Effective Date: June 6, 2022.

Operative Date: June 21, 2022.

Expiration Date: Exempt, N.J.A.C. 7:27;
January 22, 2027, N.J.A.C. 7:27A; and
June 6, 2029, N.J.A.C. 7:27E.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

The New Jersey Department of Environmental Protection (Department) is adopting new rules and amendments that establish a greenhouse gas monitoring and reporting program in accordance with the Global Warming Response Act, N.J.S.A. 26:2C-37 et seq. (P.L. 2007 c. 112; P.L. 2018 c. 197) (GWRA). The rulemaking is part of the Department's comprehensive strategy to address greenhouse gas emissions Statewide.

The rulemaking addresses gaps in the Department's greenhouse gas emissions inventory pertaining to methane and halogenated gases. Pursuant to the adopted rules, facilities that emit 100 tons or more per year of methane are required to report their methane emissions as part of the Emission Statement program, N.J.A.C. 7:27-21. Facilities that use 50 pounds or more of high global warming potential (GWP) refrigerants in refrigeration systems are required to register and report their equipment and use of refrigerants. Natural gas public utilities with local distribution lines in the State are required to report information regarding their lines, advanced leak detection, and blowdown events.

Summary of Hearing Officer's Recommendation and Agency Response:

The Department held a public hearing on July 22, 2021, conducted virtually through the Department's video conferencing software, Microsoft Teams. Paul Orlando, Director of Climate, Clean Energy, and Radiation Protection, served as the hearing officer. Nineteen people provided oral comments at the public hearing. After reviewing the written comments received during the public comment period, the hearing officer recommended that the Department adopt the proposed rules with the modifications described below in the Responses to Comments and in

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

the Summary of Agency-Initiated Changes. The Department accepts the hearing officer's recommendations.

A record of the public hearing is available for inspection in accordance with applicable law by contacting:

Department of Environmental Protection

Office of Legal Affairs

ATTN: Docket No. 06-21-05

401 East State Street

PO Box 402

Trenton, New Jersey 08625-0402

This notice of adoption document can also be viewed or downloaded from the Department's website at <http://www.nj.gov/dep/rules/adoptions.html>.

Summary of Public Comments and Agency Responses:

The Department accepted comments on the notice of proposal through August 20, 2021.

The following 562 persons provided timely written and/or oral comments:

1. Renee B. Alessio
2. Michael Babos, Merck Sharp & Dohme Corp
3. Carole Balmer
4. Raymond Cantor, New Jersey Business and Industry Association
5. Eric Choi, GHGSat Inc.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

6. Thomas R. Churchelow, New Jersey Utilities Association
7. Christine Clarke
8. Kevin Corcoran
9. Nora Coyle
10. Barbara Cuthbert
11. Rachel Dawn Davis, Waterspirit, and Ministry of Sisters of Saint Joseph of Peace
12. Linda Doherty, NJ Food Council
13. Ken Dolsky, Don't Gas the Meadowlands Coalition, New Jersey Forest Watch, Empower
New Jersey Steering Committee
14. Ken Dolsky, EmpowerNJ Coalition, BlueWaveNJ, Clean Water Action NJ, Delaware
Riverkeeper Network, Don't Gas the Meadowlands Coalition, Environment New Jersey,
Food & Water Watch, and New Jersey Sierra Club
15. Zachary M. Fabish, Sierra Club
16. Katie Feery, New Jersey Natural Gas
17. Erick Ford, New Jersey Energy Coalition, concurring with the comments of the New
Jersey Utilities Association
18. Isabela Dias Freedman, individually and on behalf of Our Green West Orange
19. Kirk Frost
20. Nancy Griffeth
21. Dennis Hart, Chemistry Council of New Jersey
22. Diane Hawkins, New Jersey State Conference of the NAACP

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

23. Nick Homyak
24. Robert Kester, Honeywell Rebellion Photonics
25. Sarah Mack, for Raymond J. Lesniak, N.J. State Senator (Ret.)
26. Bernadette Maher
27. Andrea Mateo
28. Andrew McNally, South Jersey Industries
29. Sean Mohen, Try-County Sustainability
30. Lauren Morse
31. Erin Murphy and Natalie Karas, Environmental Defense Fund
32. Christian M. Nowell
33. Matthew Ott, Global Cold Chain Alliance and Gary Schrift, International Institute of Ammonia Refrigeration
34. Linda Powell
35. David Pringle, Clean Water Action
36. Lowell Randel, Global Cold Chain Alliance and International Institute of Ammonia Refrigeration
37. Paula Rogovin
38. Kimberly Scarborough, PSEG
39. Silvia Solaun, NJ Forest Watch
40. Jeff Tittel
41. Maria Santiago Valentin, Atlantic Climate Justice Alliance

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

42. Ila Vassallo

43. Tina Weishaus, Divest NJ

44. Margaret Wood

45. The following four commenters submitted identical form comments:

Daurie Pollitto

Nancy Pollitto

Robert Pollitto

Noell Stoll

46. The following 156 commenters submitted identical form comments:

Roelie Abdi

Johan Andrade

Pat Balko

Kevin Bannon

Joe Basralia

Shirley Bensetler

Eric Benson

Hayley Berliner

Maureen Berman

Anne Bloomenthal

Elizabeth Bond

Robert Bowman

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Tamar Brill

Afina Broekman

Larissa Brookes

Robert Calafiore

Sharon Callahan

Paul Carluccio

Jerry Castor

Luis Cavallone

Barbara Chaudhery

Grace Chen

Kathleen Cherry

Laura Cisar

Claire Cooney

Marie Curtis

Barbara Cuthbert

Drew Cuthbert

Ron De Stefano

Pat Dosky

Christine Dunbat

Eileen Eisenberg

Steven Fenster

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Teresa Ford

Katherine Foster

Brian Frank

Sam Friedman

gbrill@XXXX.edu

Diane Geary

Maria Giffen-Castro

Nicole Gillespy

Lascinda Goetschius

Jeanne Golden

Barbara Gombach

Gregory Gorman

Eugene Gorrin

Laura Graumann

Nancy Griffeth

Eleanor Gruber

GY

Diane Hawkins

Chris Hazynski

Linda Henson

Chad Hetman

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Diane Heyer

Diane Heyer

Heather Heyer

Robert Heyer

Sean Hickey

Diana Horen

Rebecca Hughes

icandigit@XXX.com

Patricia Infantino

Richard Isaac

Shannon Jacobs

Dottie Ji

Kenneth Johanson

Kenneth Johnson

Kate Joyce

Karen Kallio

Kathleen Kargoll

Mona Karim

Alex Kharazi

Kevin Kimmel

Gehan Klele

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Margaret Kling

Laurel Kornfeld

Carol Kuehn

Carol Kuehn

Judy Kushner

David Lavender

Nancy Lavoie

Josette LeBeau

Veronica Leone

Carol Levin

Michael Lindemann

Denise Lytle

Sid Madison

Susan Madison

Marilyn Maney

Cate Manochio

Stephen Marshall

Kari Martin

John Massaro

Melanie McDermott

Karen McGuinness

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Linda McKilip

Jane Meggitt

Ellen Minde

JJ Mistretta

Nancy Moirano

Bert Morris

Donna Mulligan

Evelyn Murphy

Jeffrey Murphy

Susan Nashel

Elizabeth Ndoye

Shlomo Nessim

Dean Nielsen

Jennifer Nielsen

Adriana Nunez

Carl Oerke Jr

Doug O'Malley

Barbara Pal

Joanne Pannone

Linda Powell

Joann Ramos

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Kathryn Riss

Dennis Rodgers

Rich Rodgers

Lia Romeo

Jean Roy

Gary Salata

Paul Sauers

Corey Schade

Jodi Schreiber

John Schreiber

Bill Schultz

Maureen Schulze

Annette Scott

Joan Scott

P Scoville

Michael Shakarjian

Dein Shapiro

Joyce Shiffrin

James Shinnars

Diane Simmons

Loretta Simon

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

TD

Aaron Todd

Rosemary Topar

Ross Turiano

Louise Usechak

Albert Valeri

Lee Varian

Art Vatsky

Judith Velez

Liz Villarini

Alyson Waldinger

Mark Waltzer

Sheila Ward

Harriet Warner

Lynne Weiss

Ellen Whitt

Keith Wilkins

Paul Williams

47. The following two commenters submitted identical form comments:

anonymous

Cynthia Soroka-Dunn

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

48. The following 353 commenters submitted identical form comments:

Edward Adler

Saba Aftab

Martha Akers

Raghav Akula

Nancy Albanese

William Amann

Maureen Ambrose

Martin Andersen

Carol Anderson

Dennis Anderson

Weston Anderson

Barbara Andrew

Lenore Annand

Anthony Asuncion

Arlene Aughey

Jean Auletta

Stacey Ayala

Penny Bannister

Margaret Barbero

Susan Barbuto

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Joseph Basralian

Fernando Bautista

Marianne Belock

Elizabeth Bennett

Jeanette Bergeron

Ralph Billick

Steve Bogart

Kevin Bolembach

Mary Anne Borge

Kathi Bornemann

George Bourlotos

Robert Bowman

Michelle Boylan

Lorraine Brabham

Kristin Bradley

Caitlin Brady

Ken Branson

Danielle Brazer

Gail Breen

Margaret Breunig

Ann Briscese

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Patricia Burke

Margaret Burns

Eugene Cahill

Suzanne Cammerano

Mary Champion

Mark Canright

Rebecca Canright

Jessica Caron

Nancy Carringer

Nicholas Cartabona

Theodore Chase

Hsienmin Chen

Susan Clark

Michael Cloud

Dana Cooper

Rosemarie Cordeaux

Maria Correia

Suzanne Curry

Barbara Cuthbert

Drew Cuthbert

Marie Danna

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Eileen Davis

Ron De Stefano

Rosemary Deflorio

Janet Dietz

Abbe Dolobowsky

Donna Dorsey

Marc Dragish

Shane Dunne

Susan Eckstein

Carolyn Edelman

Valeriya Efimova

Annalisa Erba

Sharon Errickson

Ron Etter

V Euripides

MaryAnn Fahey

Judy Fairless

Shannon Falkner

Marintha Farber

Steven Fenster

Leona Fluck

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Miryam Fonken

Carl Ford

Trevanne Foxton

Trevanne Foxton

Kirk Frost

Jack Gajda

Phyllis Garr

Kim Gavin

Jeremy Geller

Debra Gemind

Pamela Gendlek

Robert Gerdes

Muneerah Gilkerson

Joan Gillen

Phyllis Ginsberg

Daniela Gioseffi

Denise Gomolka

Greg Gorman

Eugene Gorrin

Sean Gough

Stan Greberis

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Randi Greenberg

Robert Greene

Donna Hadsall

Emily Hall

Kenneth Hammond

Blue Handel

Amy Hansen

Joseph Harrison

Peter Harrison

Laurie Hartman

John Hauch

Michael Hayes

Chris Hazynski

Stephen Heldt

James Hemm

Bettina Hempel

Stephen Hirsch

Chris Hitchcock

Ruth Hodum

Fred Holden

Kathleen Horne

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Toni Howard

Joe Huber

Bryce Hugelmeyer

Rebecca Hughes

Phyllis Ianniello

Patricia Infantino

Raymond Intemann

Howard Iwahashi

Doris Jackson

Aj Jelonnek

Erica Johanson

Ken Johanson

Eric Johnson

Robert Jonas

Robert Kaminski

Jessica Kari

Theresa Karmozyn

Freda Karpf

Meredith Kates

John Keim

Donald Keir

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Karen Kelleher

Philip Kelly

Cecile Kent

David Kerr

Lynda Kerwin

Kevin Kimmel

Donna Kingsley

Gehan Klele

Julia Knaz

Patricia Kortjohn

Thomas Koven

Lisa Krieger

Carol Kuehn

Daniel Kurz

Judith Kushner

Elizabeth Lacy

Mabel Lago

John Landau

JYH Lay

Michael Lebrun

William Lee

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Lee Leon

Janet Letusick-Spears

Mary Levitt

Maida Lewinson

Diane Liakos

Gay Linfante

Phil Lipari

Maria Lozano

Paul Lucente

Tyler Lund

Laura Lynch

Cheryl Lynn

Terry Lyons

Denise Lytle

Sam Magid

Michelle Maisto

Ann Malyon

Marilyn Maney

Catherine Manochio

Viola Markus

Edward Mayer

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Sheila Mazar

Barbara Mearthur

Peter McCarthy

Louise McClure

Deborah McConnell

Mary Beth McDonough

Karen McGuinness

Pamela McIntyre

Linda McKilip

Jane Mcmahill

Harry McNally

Michael Megnin

Marianne Merlo

Charmaine Michaels

Barbara Miller

Marilyn Miller

Barbara Milloy

Ellen Minde

Judy Minot

Marcia Minuskin

George Moffatt

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Bryan Moffitt

Vincent Mogavero

Daniel Monroe

Bonnie Monte

Leland Montgomery

Eva Moore

Kathy Moore

Robert More

Joanne Morgan

Christine Mueller

Linda Mullaney

Marilynn Mullen

Laraine Muller

Patrick Mulligan

Peter Mulshine

Andrew Mumford

Donna Murphy

Russell Murray

Leonard Neering

Thelma Nelson

Caroline O'Brien

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Carl Ochs

Michele Ochsner

Carl Oerke Jr

Michael O'Farrell

Caren Olmsted

Jim Onesios

J Otani

Astrid Pagano

Barbara Pal

Tari Pantaleo

Sp Pasricha

John Patafio

Steven Pavick

Andrew Pawlan

Ellen Pedersen

Barbara Pepe

Donna Pfeffer

Melissa Pflugh

Daurie Pollitto

Nancy Pollitto

Robert Pollitto

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Raven Potosky

Linda Powell

Linda Powell

Richard Puglisi

Lisa Quartararo

Beverly Railsback

Ronald Raksen

Joann Ramos

Patrick Randow

Jeffrey Rattner

Edward Reichman

Mary Reilly

Ysan Reischke

Carolyn Rice

Ben Rich

Richard Riggs

Stacie Rillo

Charles Rinear

Paul Rinear

Joanne Rist

Mark Rist

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Lisa Roche

Madeleine Roese

Mark Romanski

Judith Ross

Linda Rossin

Sharon Rothe

Lincoln Rowley

Jean Roy

Marc Rubin

Nelida Ruiz

Raffaella S.

Paul Sauers

Dylan Scalora

Corey Schade

Douglas Schneller

John Schreiber

Stephen Schreiber

Karen Schroeder

Maureen Schulze

Ari Schwartz

Brandon Schwartz

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Mary Ellen Shaw

Randy Shepard

Vikram Sikand

Michael Slane

Ceil Slauson

Luke Slott

Ruth Snediker

Molly Solanki

William Spadel

Barbara Spellmeyer

Carol Spillane-Mueller

Peter Spool

Denise Sprague

Karen Spring

Noel Stoll

Linda Strange

Alan Stultz

Joy Sullivan

Jean-Philippe Suter

Mike Tanucci

Nancy Tanzi

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Steve Tardif

Joseph Taylor

Loraine Terrell

Bonnie Tillery

Barbara Tillman

Patricia Tolti

Anthony Tomaselli

Jim Tomori

Elizabeth Tordini

Bernadette Tourtual

Vivien Trichter

Stephen Troyanovich

Jeyna Tutundzic

Jeanne Uhl

Rajdeep Usgaonker

William Vachula

William Van Bel

Carol Van Kirk

Lee Varian

Nancy Varin

Ben Vitale

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Don Vonderschmidt

Mark Waltzer

Anthony Weil

Daniel Weinberger

Dianne Wexler

John Wheeler

Crystal Whitehead

Keith Wilkins

Jennifer Williams

Patricia Williamson

M.J. Wilson

Rachel Wolf

Hansruedi Wuergler

Donna Yavorsky

Nabhan Zaman

Dawn Zelinski

Steve Zimet

Jerome Zornesky

49. The following five commenters submitted identical form comments:

Lucy Almeida

Leah Kane

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Madison Lutchko

James Morgan

Rita Raftery

50. The following two commenters submitted identical form comments:

Carol Kuehn

Linda Powell

The timely submitted comments and the Department's responses are summarized below. The number(s) in parentheses after each comment identify the respective commenter(s) listed above. The general comments are presented first, followed by comments relating to specific aspects of the proposal.

GREENHOUSE GAS MONITORING AND REPORTING

General

General Support

1. COMMENT: It is appreciated that the Department structured the proposed rules with the intent to minimize reporting obligations by only seeking to gain information that is otherwise not readily available to the Department. By limiting the information being sought, the business community, as a whole, is not being overly burdened, costs are kept to a minimum, and the Department is otherwise able to secure the information it believes it needs to make informed

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

decisions to mitigate greenhouse gas emissions in the future. These goals and the intent of the rulemaking is supported. (4)

2. COMMENT: It is time to get the rules done. (1 and 27)

3. COMMENT: The Department's efforts to obtain more comprehensive information on methane emissions occurring within the State, including with regard to downstream distribution of natural gas, is appreciated. (24)

4. COMMENT: The Department's proposed Greenhouse Gas Monitoring and Reporting Rules, which gather information about categories of emissions previously overlooked, is an important step toward ensuring that New Jersey is able to meet its greenhouse gas emission reduction goals. However, much more work needs to be done to address the climate crisis. (15)

5. COMMENT: The reporting requirements for gas public utilities are an important step to enhance the accuracy of the State's greenhouse gas emissions inventory and to improve transparency around gas utility practices that contribute to methane emissions. Improving gas utility reporting will enhance accountability and provide the Department, gas utilities, and the public with necessary information to inform greenhouse gas emissions tracking and decision-making about our energy system. (31)

RESPONSE TO COMMENTS 1 THROUGH 5: The Department acknowledges the commenters' support for the rulemaking.

6. COMMENT: The Department's goal of reducing emissions of greenhouse gases with high global warming potential is supported. In addition to the current rulemaking, the State should

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

address current barriers to companies wanting to transition from hydrofluorocarbons (HFCs) to anhydrous ammonia. (33)

7. COMMENT: The proposed rules can be effective in setting the foundation for reporting and gauging the emissions baseline. However, it will be difficult for the industry to shift from HFCs to currently available effective technology because of other regulatory burdens. (36)

RESPONSE TO COMMENTS 6 AND 7: The Department acknowledges the commenters' support for the rules. The comments regarding shifting from HFCs are beyond the scope of this rulemaking.

Scope of Rules, Generally

Black carbon emissions

8. COMMENT: The Department should require reporting of black carbon emissions. (1, 10, 11, 13, 14, 15, 20, 23, 29, 34, 35, 40, 42, 43, 46, 48, and 49)

RESPONSE: As the Department explained in the notice of proposal Summary, the GWRA requires that Statewide greenhouse gas emissions be reduced to 80 percent less than the 2006 level by 2050 (80x50 goal). 53 N.J.R. at 1064. To determine the State's baseline emissions profile from which to calculate the 80x50 goal and track the State's progress in meeting the greenhouse gas emissions reduction goal, the GWRA required the Department to establish a Statewide greenhouse gas emissions inventory. N.J.S.A. 26:2C-40. The Department published the initial inventory report in November 2008 and has released inventory updates periodically since then. The inventory reports include Statewide greenhouse gas emissions data from

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

significant sources and annual changes in emissions levels. The most recent inventory, published in February 2021, is the Department's New Jersey Greenhouse Gas Inventory, Mid-Cycle Update Report (February 2021, Mid-Cycle Update Report), available at https://www.nj.gov/dep/aqes/ghgarchive/MCU%20GHG%20Inventory_2021.pdf.

Through its Statewide emissions inventory, the Department has been tracking most significant sources of greenhouse gas emissions by obtaining emissions data from various State and Federal resources. See 53 N.J.R. at 1063-1065. Rather than require duplicative reporting, the Department focused its rulemaking on those sources where direct reporting to the Department would provide emissions data that would provide more reliable emission estimates and, therefore, enhance the Department's inventory. See *ibid.* Additionally, as the Department explained, the new reporting requirements will enable the Department, as well as other government agencies and the public, to track emission trends from the regulated entities, which will help raise awareness, as well as identify and implement emission reduction strategies. See *id.* at 1070.

Black carbon is an aerosol component of particulate matter and is formed in varying concentrations with other particulate matter through the incomplete combustion of fossil fuels and biomass burning. See New Jersey's Global Warming Response Act 80x50 Report, October 15, 2020, at p. 133, <https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf> (80x50 Report). Black carbon contributes to climate warming differently from other climate pollutants. *Ibid.* It absorbs sunlight, directly releases heat energy into the atmosphere, and is

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

quickly removed by rain or by deposition in a few days or weeks. *Ibid.* Sources that emit black carbon emit other particles that may cool or warm the atmosphere. *Ibid.*

As explained in the 80x50 Report, “[b]lack carbon is not a significant contributor to New Jersey’s climate pollutant inventory and black carbon from stationary sources even less so.”

Ibid. Nevertheless, the Department recognizes that “black carbon compromises local air quality and black carbon resulting from diesel combustion is a known carcinogen.” *Ibid.* Therefore, the State’s “overall strategy for reducing black carbon focuses on sources that emit higher black carbon to organic carbon ratios such as diesel exhaust.” *Ibid.*

The Department has the information it needs to estimate black carbon emissions by source as part of the State’s greenhouse gas emissions inventory in accordance with the GWRA. See 80x50 Report at pp. 134-136. As explained in the 80x50 Report, the United States Environmental Protection Agency’s (EPA) National Emissions Inventory (NEI), released every three years, provides detailed estimates of black carbon emissions for New Jersey, divided into source subcategories. In April 2020, the EPA released data for the 2017 NEI, which provided information that the Department used in developing its 80x50 Report. See *id.* at p. 135. The Department also utilized NEI data to estimate black carbon emissions included in the February 2021, Mid-Cycle Update Report.

https://www.nj.gov/dep/aqes/ghgarchive/MCU%20GHG%20Inventory_2021.pdf. The

Department will continue to include black carbon emissions and refine its methodologies in future greenhouse gas emissions inventory reports.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Natural gas systems

9. COMMENT: There is a lack of, or limited, information about transmission system facilities and transmission system pipelines available to the State and conflicting information reported to Federal agencies compared with the information reported to the State. The Department should require transmission system facilities to submit greenhouse gas emissions and air pollutants information. (26)

10. COMMENT: Only the gas pipelines that are considered utilities in the State are covered under the rules, therefore, interstate pipelines are not. The transmission system facilities are under Federal Energy Regulatory Commission (FERC) regulations and are exempted from State rules once FERC gives them a public convenience and necessity delegation. Therefore, the emissions from interstate pipelines and the massive compressor stations, which are causes of blowdowns of methane, will not be monitored under the rules as currently written. (40)

11. COMMENT: The Department should require comprehensive reporting and standards for air pollutants and greenhouse gases from all types of natural gas facilities: refineries, power plants, industrial facilities, proposed liquid natural gas export facilities, natural gas delivery plants, natural gas turbines, and natural gas transmission and distribution compressor stations, metering stations, regulating stations, and pipelines. Both point source and fugitive emissions from facilities should be accounted for. (3, 11, 26, 43, and 50)

12. COMMENT: The Department should require all natural gas facilities (transmission and distribution) and natural gas power plants to provide comprehensive reports of actual air

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

contaminant and greenhouse gas emissions directly to the Department annually beginning with the year 2021, so that the Department no longer relies on reporting made to other agencies. (19)

13. COMMENT: The Department should develop a comprehensive emission list for reporting requirements from all natural gas facilities (transmission and distribution) and all natural gas power plants. The list should include, but not be limited to air contaminants, such as benzene, beryllium, CO, CO₂, and methane. (8, 10, 19, 26, and 30)

14. COMMENT: Together with CO₂, methane and halogen gases are greenhouse gases that are causing climate change. Methane gas is a very dangerous gas that pollutes the air we breathe, the water we drink, and the food we eat. New research suggests that methane leakage during the extraction and distribution of natural gas might be undermining the potential to reduce global warming emissions by using natural gas in place of higher carbon fossil fuels, such as coal and oil. Therefore, the Department should hold all natural gas companies, from production to distribution, accountable for their pollution. New horizontal drilling and hydraulic fracking have allowed the natural gas and oil pollution to expand over the past decade, and raised new questions about the impacts that natural gas extraction and associated methane leaks will have on climate change, public health and safety, land and water resources, and people. This expansion is currently outpacing our capacity to understand and manage the risks. (18)

15. COMMENT: The Department should develop a comprehensive human health and environmental impact report annually for each and every air contaminant emitted from natural gas facilities. The data gathered and the impact reports should be made available to the public. The Department should create a comprehensive database that includes monitoring all air

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

contaminants, all violations, and all methane emission events for all natural gas facilities (transmission and distribution) and natural gas power plants in New Jersey. (19)

RESPONSE TO COMMENTS 9 THROUGH 15: As discussed in the Response to Comment 8, the Department focused the greenhouse gas reporting program on those sources where direct reporting would provide useful emissions data. See 53 N.J.R. at 1063-1065. The Department, through its Statewide emissions inventory, has been tracking most significant sources of greenhouse gas emissions by obtaining emissions data from State and Federal agencies, to which these sources are already required to report. *Id.* at 1064. For example, electric generation units, oil refineries, bulk storage facilities, and other large commercial and industrial entities submit their greenhouse gas emissions through an annual Emission Statement pursuant to existing N.J.A.C. 7:27-21. See *ibid.* Transmission companies that utilize large compressors and distribution facilities that use combustion equipment must report their emissions from these sources through the Emission Statement program. See 80x50 Report at p.115.

Emissions from transmission line blowdown events in excess of 50 standard cubic feet (scf) are reported to the EPA in accordance with Federal rules at 40 CFR Part 98, Mandatory Greenhouse Gas Reporting. 53 N.J.R. at 1066. The Federal greenhouse gas reporting rules also require transmission facilities to report their greenhouse emissions in excess of 25,000 metric tons of carbon dioxide equivalent (CO₂e). The Department utilizes the EPA's State Inventory Tool (SIT) to calculate estimated methane emissions from natural gas transmission lines in the State. See *id.* at 1064-1065. Therefore, the Department has sufficient information through State

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

and Federal resources to substantially monitor emissions from transmission facilities and pipelines.

All facilities, including landfills, sewage treatment plants, natural gas compressor stations, and other natural gas facilities, that emit or have the potential to emit 100 tons or more per year of methane are required to submit an Emission Statement pursuant to the rules. 53 N.J.R. at 1065. See the Response to Comments 65 through 89 regarding the requirements for natural gas public utilities to monitor and report their methane emissions pursuant to the rules. As the adopted rules are focused on greenhouse gas emissions, specifically, methane and halogenated gases, reporting of other air pollutants and emissions reduction requirements are outside the scope of this rulemaking.

Other facilities and sources

16. COMMENT: The Department should include in this rulemaking carbon dioxide (CO₂) emissions from logging of all forested lands in New Jersey. (13)

RESPONSE: The loss of carbon sequestration from logging activities is captured under “Land Clearing” in the State Greenhouse Gas Inventory. See February 2021, Mid-Cycle Update Report at p. 6; see also 2018 Statewide Greenhouse Gs Emissions Inventory (October 2019) at p. 18, https://www.nj.gov/dep/aqes/ghgarchive/GHG%20Inventory%20Report_2019.pdf. Fossil fuels used by land clearing equipment are already accounted for in the greenhouse gas inventory. Therefore, the Department did not include direct reporting of individual land clearing operations in this rulemaking.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

17. COMMENT: The rules should be revised to include monitoring and reporting of biomass emissions, which include greenhouse gases and black carbon. (10, 14, 34, and 40)

18. COMMENT: To effectively address the climate crisis and reduce greenhouse gas emissions, the Department needs to stop biomass facilities, which are dirtier than burning coal and logging our healthiest forests under the guise of conservation. (39)

RESPONSE TO COMMENTS 17 AND 18: All facilities, including landfills, sewage treatment plants, natural gas compressor stations, and other natural gas facilities, that emit, or have the potential to emit, 100 tons per year of methane are required to submit an Emission Statement pursuant to the rule. 53 N.J.R. at 1065. The rules do not exempt biomass and food waste operations, which are subject to the same threshold. The Department did not propose to require direct reporting from these operations separate from the Emission Statement program because facilities that emit less than 100 tons of methane per year threshold are not considered significant sources of greenhouse gas emissions for the purposes of this rulemaking.

See the Response to Comment 8 regarding black carbon emissions.

20-Year Global Warming Potential Value

19. COMMENT: The 100-year GWP value is not the appropriate standard unit for reporting short-lived climate pollutants, namely methane, black carbon, and hydrofluorocarbons (HFCs). The Department must uphold S3215, signed into law by Governor Murphy, which requires State agencies to calculate and evaluate greenhouse gases using the 20-year GWP. Because the rules

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

do not use the 20-year GWP, the potential emissions from these potent greenhouse gas emissions will be undercounted. For example, using the 100-year value understates the warming value of methane by a factor of 3.4. Using the 100-year GWP means that New Jersey will not be reducing greenhouse gas emission by 80 percent by 2050. (13, 14, and 23)

20. COMMENT: A law signed by Governor Murphy 18 months ago required the Department to use the 20-year time horizon when it comes to evaluating climate emissions; but the rules use a 100-year time horizon. As a result, the proposed rules will lead to a significant undercount in greenhouse gases because it is not appropriately factoring in short-lived climate pollutants, especially methane and black carbon. The final rules must be corrected to use the 20-year time horizon. (10, 11, 13, 14, 23, 29, 30, 35, 41, 42, 43, 46, 48, and 49)

21. COMMENT: The Department can derive great benefit from recognizing methane as a powerful short-lived climate forcer by applying its correct global warming potential on a 20-year time horizon. Specific measures targeting methane emission reductions will have the most immediate impact on atmospheric temperature reduction. In other words, the most effective means of reducing greenhouse gas emissions quickly, on the time scale of eight to 10 years (by 2030), is to greatly reduce methane emissions now, as a first measure. (14)

22. COMMENT: The rules should use the 20-year time horizon, because methane is 86 times more virulent than CO₂. (40)

23. COMMENT: The Department should propose to use a 20-year GWP value as required by law. The 20-year value is especially important due to the short-lived and more intensely impactful aspects of methane emissions that were clearly detailed in the IPCC's Sixth

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Assessment Report. The 100-year GWP value of methane is 25, and the 20-year value is 86. The proposal to use the 100-year GWP time horizon is too high. The Department did not justify its use in any way, except an assertion that it maintains consistency with prior reporting and analyses of CO_{2e}. The Department could generate two values for CO_{2e} using both the 100- and 20-year values. (10 and 34)

24. COMMENT: The Department should stop using the GWRA 100-year modeling for CO_{2e} weighting and calculation. Instead, the Department should capture all greenhouse gas emissions in their actual emissions quantities each year and utilize the multiplier of each greenhouse gas emission for one- to 10-year project impact as a full impact of the greenhouse gas emissions for that year. (8, 19, 26, and 50)

RESPONSE TO COMMENTS 19 THROUGH 24: As explained in the notice of proposal Summary, the Intergovernmental Panel on Climate Change (IPCC) “has published GWP values for different greenhouse gases based on a 20-year and a 100-year time horizon.” 53 N.J.R. at 1064. To maintain consistency with prior emission inventories and the EPA’s national inventories when calculating CO_{2e} emissions, the Department used the IPCC Fourth Assessment Report (AR4) 100-year GWP values for its 2018 greenhouse gas emissions inventory report, as well as the 80x50 Report. *Ibid.* The Department, therefore, used the 100-year GWP value in defining “global warming potential value” and “GWP value” at N.J.A.C. 7:27E-1.2. The GWP value is used to determine if a refrigerant is “high-GWP,” that is, has a 100-year GWP value equal to or greater than 150, and the refrigeration system owner/operator is, therefore, subject to

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

N.J.A.C. 7:27E-2. Utilizing the 100-year GWP value, therefore, again ensures consistency with the Department's emissions calculations.

The greenhouse gas emission inventory report totals emissions utilizing a consistent GWP threshold, that is, the 100-year GWP values, that align with IPCC reporting standards for comparison between countries and states, including New Jersey. The Department will use this data, as appropriate, to publish greenhouse gas emissions from short-lived climate pollutants as part of the State's greenhouse emissions inventory pursuant to the GWRA. The Department intends to include emissions summaries in the next full greenhouse gas emissions inventory report (anticipated in first quarter 2022) using both 100-year GWP and 20-year GWP values. The Department is upholding the intent of the law by publishing the 20-year GWP values in the inventory report and by considering these values as the Department develops both short- and long-term emission reduction strategies. The Department is not familiar with the one- or 10-year time horizon referenced.

Refrigeration Systems Registration and Reporting

General

25. COMMENT: The proposed rules will create a significant amount of work through data collection and reporting by requiring the registration and reporting requirements for refrigeration system equipment and refrigerants even though these systems do not emit material amounts of greenhouse gases. Therefore, the Department should include a sunset provision that directs the Department to require reporting of this data for two years. At that time, if the reporting shows

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

that the emissions are extremely low (for example, less than two percent of the total Statewide greenhouse gas emissions), the rules must be repealed. (21)

26. COMMENT: Emissions from refrigeration systems are *de minimis*, which is why the EPA does not require such reporting. Although the overall cost and burden would not be significant to comply with the rules, these costs and burdens are on top of all of the other environmental and governmental reporting requirements and add to an already burdensome regulatory system. Given the insignificant amount of greenhouse gas emissions from this equipment in the State, the Department should not adopt these reporting requirements. Alternatively, the Department should commit to evaluating whether the burdens outweigh any intended benefits after the initial reports are received. (4)

RESPONSE TO COMMENTS 25 AND 26: The Department designed the greenhouse gas monitoring and reporting program to minimize the burden on regulated entities, while collecting the information needed to enhance the Department's emissions inventory. As explained in the notice of proposal Summary, the Department identified refrigeration systems as significant sources of halogenated gases, which are potent greenhouse gases and short-lived climate pollutants, and determined that direct reporting would better inform the State's emissions inventory. See 53 N.J.R at 1064-1065. The Department limited the monitoring and reporting of refrigerant use to an owner or operator of a facility that installs or operates at least one refrigeration system with a full charge of 50 pounds or more of high-GWP refrigerant, because these refrigeration systems have been shown to have large amounts of high-GWP refrigerant and significant leak rates. See *id.* at 1067, Table 1. As explained in the Response to Comment 32, the

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Department remains consistent with Federal refrigerant reporting requirements at 40 CFR 82 Subpart F by extending the same threshold of 50 pounds or more of refrigerant capacity. The Department will evaluate the program on an ongoing basis and propose any appropriate changes in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq. (APA).

27. COMMENT: The Department should reconsider its approach for monitoring refrigerant leaks. Instead of developing a new recordkeeping program, which will consume limited Department resources and impose an undue burden on regulated entities, the Department should rely on its existing Emission Statement Program, N.J.A.C. 7:27-21. In its February 21, 2020, stakeholder meeting, the Department indicated that it intends to require reporting from significant emitters of HFCs but did not mention requiring the registration of equipment. The Department did not explain how the burdensome requirement of registering individual pieces of equipment, which is not compelled by the GWRA, Executive Order No. 100 (2020) (EO No. 100), or Administrative Order 2020-01 (McCabe) (AO No. 1), will help better monitor emissions of refrigerant gases compared with requiring facility reporting of releases as part of the Emission Statement Program. Instead, the Department stated only that it considered California's program, without indicating how the California program furthers the GWRA's goals. (2)

RESPONSE: The adopted rules do not require affected facilities to register each piece of equipment. Rather, the rules will require an owner or operator of a facility with one or more refrigeration systems that use a charge greater or equal to 50 pounds of high-GWP refrigerant to provide specific facility information as part of a registration submittal to the Department. The

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Department limited the information required for both registration and reporting to minimize the regulatory burden on facilities.

The Emission Statement Program establishes a periodic, comprehensive inventory of air pollutants from stationary sources in the State, as required by the Clean Air Act, 42 U.S.C. § 7511a(a)(3)(B). The Department considered utilizing the Emission Statement Program (N.J.A.C. 7:27-21) as a vehicle for reporting emissions, but determined that the Emission Statement Program does not apply to most facilities that are subject to new N.J.A.C. 7:27E-2 because they do not meet the emission thresholds. See N.J.A.C. 7:27-21.2. Therefore, mandating the use of the Emission Statement Program to satisfy the reporting requirements would have been unduly burdensome to the majority of regulated entities. These facilities, which include small businesses, may need additional technical support to use the Department's Remote Access Data Information System (RADIUS) software, to comply with all aspects of the Emission Statement Program. This approach would create an undue regulatory burden for the regulated community. Therefore, the Department determined not to use the Emission Statement Program to collect HFC emissions data to comply with the rules at N.J.A.C. 7:27E-2. The Department will utilize its online business portal at NJDEPonline.com and store the reports on the Department's existing database system, the New Jersey Environmental Management System (NJEMS), which is simple to use and does not require any special software.

The Department looked at California's program because California has a regulatory program in place to address gaps in the Federal rules. See 17 CCR § 95385. California uses thresholds similar to those under the Federal rules.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

28. COMMENT: The New Jersey Department of Labor and Workforce Development (Department of Labor) rules require the registration of refrigeration systems, making the Department's proposed registration requirement redundant. In lieu of the registration requirement, the Department could require the pertinent information to be included in the owner/operator's annual Facility Refrigeration System Report. However, if the Department believes facility registration with the Department is necessary, registration should be a one-time event. (28 and 38)

29. COMMENT: The proposed rules require the owner or operator of a facility with one or more refrigeration systems to register that facility with the Department. The registration is valid for five years and a renewed registration is required, along with a registration fee. However, the Department of Labor currently requires the registration of refrigeration systems pursuant to N.J.A.C. 12:90-6, Refrigeration Systems. To reduce redundancy, the proof of registration made through the Department of Labor should be considered sufficient. (4, 6, and 17)

RESPONSE TO COMMENTS 28 AND 29: The Department of Labor's program is not adequate for the Department's purpose and cannot substitute for the adopted rules. The Department's program is intended to collect information to better inform the State's greenhouse gas emissions inventory and policies to achieve the 80x50 goal. As explained in the Response to Comments 25 and 26, the Department identified refrigeration systems as significant sources of halogenated gases and determined that direct reporting would better inform the State's emissions inventory. Accordingly, the Department's rules at N.J.A.C. 7:27E-2 apply to owners and

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

operators of facilities with at least one refrigeration system with a full charge of 50 pounds or more of high-GWP refrigerant and require annual reporting regarding the type of each high-GWP refrigerant used. As established at N.J.A.C. 7:27E-2, registration is the trigger for the reporting and recordkeeping requirements. See N.J.A.C. 7:27E-2.3(a) (“The owner or operator of a facility subject to registration ...”) and N.J.A.C. 7:27E-2.4(a) (“The owner or operator of a facility registered ...”).

In contrast, the purpose of the Department of Labor rules is to protect the lives and safety of persons who operate boilers, pressure vessels, and refrigeration units, or who live or work in buildings in which this equipment is used. The Department of Labor does not collect information on the amount of refrigerant used. The Department of Labor rules also regulate different facilities and utilize a different methodology for determining whether a facility is subject to registration.

As established at N.J.A.C. 7:27E-2, registration is the trigger for the reporting and recordkeeping requirements. See N.J.A.C. 7:27E-2.3(a) (“The owner or operator of a facility subject to registration ...”) and N.J.A.C. 7:27E-2.4(a) (“The owner or operator of a facility registered ...”). As explained in the Response to Comments 25 and 26, the Department designed the program to minimize the burden on regulated entities, while collecting the information needed to enhance the Department’s emissions inventory. As explained in the notice of proposal Summary, an owner or operator is required to provide basic information to register. 53 N.J.R. at 1068. Additionally, registration is done online through the Department’s business portal at NJDEPonline.com. Therefore, the registration requirements are not onerous.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

30. COMMENT: The Department proposes to require facilities to report various pieces of information, which the Department will use to calculate refrigerant leakage and subsequent emissions from each facility. The proposed rules would create a new, burdensome program, which will require reporting of information that will not be useful to accurately determine leakage, is a significant departure from the longstanding methodology used by the EPA and industry for determining whether equipment has leaked, and could create confusion, unless the program is consistent with the Federal refrigerant compliance program that has been in place for almost 30 years.

Under the EPA's system, leaks are determined based on the amount of refrigerant added to a piece of equipment after a repair, over and above what is recovered from the equipment before the repair. The Department has not explained how the existing method for calculating leaks under Federal regulations is inadequate for determining emissions to be reported to the Department. The transfer of voluminous amounts of data to the Department, for the Department to perform calculations already being performed by facilities, must be justified on some basis, other than California does it this way. Additionally, some of the information that would be required for the Department to determine leaks would lead to incorrect calculations by the Department. Many large facilities have a combination of small and large refrigerant equipment. Refrigerant is purchased based on the type of refrigerant the equipment uses, not on the size of the equipment. Therefore, a 25-pound cylinder of R134A may be used to repair a 200-pound chiller or 20 small refrigerators. Similarly, refrigerants sent off for disposal may be from 30

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

small pieces of equipment or one large piece of equipment. Using a site's inventory purchases and off-site disposals of refrigerant in the calculation of leaks is almost guaranteed to incorrectly reflect actual leaks.

The current industry standard for managing and maintaining the voluminous amounts of data required by the Federal rules is the Refrigerant Compliance Management (RCM) database. This database contains the information required by the proposed rules, has the capability to report all releases of refrigerants, and is available for inspection by the Department, as well as the EPA. Rather than require facilities to transfer significant amounts of information currently maintained, the Department should require facilities to report leaks under the Emission Statement program. This approach would allow the Department to meet its goals in a much more efficient and accurate manner. (2)

RESPONSE: In 2020, the EPA rescinded parts of the Refrigerant Management Program requirements that had previously applied to HFCs, which are substitutes for ozone-depleting substances. See 85 FR 14,150 (March 11, 2020). Pursuant to the Federal regulation, the appliance and leak repair provisions of the Federal program at 40 CFR 82 Subpart F apply only to ozone-depleting substances and not to HFCs. See *ibid*.

The Department's rules apply to owners and/or operators of a facility with larger refrigeration systems (50 pounds or greater charge). As explained in the notice of proposal Summary, refrigeration leaks comprise up to 35 percent of the State's estimated overall halogenated gas emissions. The registration and reporting program will allow the Department to

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

identify the use of high-GWP refrigerants in refrigeration systems in the State. The information will provide a more accurate baseline inventory of these pollutants. See 53 N.J.R. at 1067.

The adopted rules require owners and operators subject to the rules to annually report identification information regarding each refrigeration system that uses 50 or more pounds of refrigerant in the facility. See N.J.A.C. 7:27E-2.3(b)1 through 12. The adopted rules do not apply to smaller systems. The refrigeration system report requires identification of the type of high-GWP refrigerant for each affected refrigeration system at the facility. N.J.A.C. 7:27E-2.3(b)13 through 17. Therefore, facilities that have multiple systems are required to report information related only to equipment that meets the regulatory threshold.

The Department considered requirements at 40 CFR 82 Subpart F in developing the refrigeration system reporting program. See, for example, 40 CFR 82.156. The Department applied the same threshold for requiring reporting from refrigeration systems to maintain consistency for the industry.

The Federal rules require leak maintenance, service, and repair within specific timeframes and include retrofit plans as part of reporting and recordkeeping. Maintenance and leak repair requirements for refrigeration systems are not part of this rulemaking. The Department's rules require reporting of the quantity of each high-GWP refrigerant purchased, the amount of each high-GWP refrigerant charged into each affected refrigeration system that is not considered part of an initial refrigerant charge, and the amounts recovered, stored, or shipped from each affected refrigeration system by the facility to be reclaimed or destroyed in a calendar year, in addition to identification information for equipment subject to the proposed rules. This

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

information will achieve the Department's objectives of establishing an inventory of high-GWP refrigerants used in the State and will inform future policies to attain greenhouse gas emission reductions.

The Department does not require use of any particular third-party database for maintaining records. The method and format of recordkeeping is at the discretion of the regulated facility.

Please see the Response to Comment 27 regarding the Department's consideration of the Emission Statement Program for the HFC reporting program.

Applicability and Scope

31. COMMENT: The Department's focus on chillers, industrial process refrigeration, and medium and large commercial refrigeration excludes other large sources of refrigerant emissions. Residential and commercial air conditioning systems have a high annual leakage rate (one to five percent) and can have charge orders of magnitude greater than smaller sources such as domestic refrigeration. See notice of Proposal Table 1, 53 N.J.R. at 1067. These systems should also be brought into the coverage of the rules, or at least the category should be split, so that large systems—such as those in larger commercial buildings or residential complexes—are not inaccurately lumped in with smaller systems. (15)

RESPONSE: As described in the notice of proposal Summary, air conditioning appliances contain 0.5 to 100 pounds of refrigerant charge while chillers contain 10 to 10,000 pounds of refrigerant charge. 53 N.J.R. at 1067. As explained in the notice of proposal Summary, since air

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

conditioning appliances contain small to moderate amounts of refrigerant and have low leak rates, according to the IPCC, the Department excluded air conditioning appliances from the reporting program. See *ibid*. However, because chillers can contain large amounts of refrigerant and have been shown to leak refrigerant at a rate of two to 15 percent per year, the Department excluded chillers from the definition of air conditioning, making chillers subject to the rules regardless of how the chiller is being used. *Ibid*.

32. COMMENT: The Department should raise the 50-pound threshold to match the 50- to 500-pound threshold range for leak inspection referenced in the EPA's Clean Air Act for consistency with Federal standards. Certain systems also contain electronic leak detection and monitoring, and these systems are exempt from inspections under the Clean Air Act. The Department should include a similar exemption for systems with electronic leak detection or monitoring. (12)

RESPONSE: The Department's applicability threshold of 50 pounds or more of refrigerant capacity is consistent with the Federal rules at 40 CFR 82 Subpart F. See 40 CFR 82.156(i). The reference to the EPA's threshold range for refrigeration systems with a full charge of 50 or more pounds but less than 500 pounds applies to requirements for leak inspections. See 40 CFR 82.157(g)(1)(ii). The EPA also has leak inspection requirements for refrigeration systems with a full charge of 500 or more pounds. See 40 CFR 82.157(g)(1)(i). The EPA's rules exempt quarterly or annual leak inspections on appliances monitored by an automatic leak detection system that meets certain specifications and is audited or calibrated annually. See 40 CFR 82.157(g)(4). However, Federal rules also require the owner or operator using an automatic leak

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

detection system to maintain records. See 40 CFR 82.157(l)(4). The Department's rules do not require leak inspections by the owner or operator of a facility on any equipment.

Definitions

33. COMMENT: The definition of "refrigeration system" appropriately exempts comfort cooling systems. (4, 28, and 38)

RESPONSE: The Department acknowledges the commenters' support.

34. COMMENT: The Department should clarify the distinction between chillers and air conditioning appliances used for comfort cooling. (6 and 17)

35. COMMENT: The Department states in the notice of proposal Summary that, "To avoid uncertainty, the Department proposes to exclude chillers, which are used for comfort cooling and are often large commercial refrigeration systems, from the definition of air-conditioning.

Therefore, as proposed, refrigeration systems *include chillers, but exclude air-conditioning* appliances [emphasis added]." 53 N.J.R. at 167. Further along, the definition of "air-conditioning" at N.J.A.C. 7:27E-1.2 reads, "'Air- conditioning'" means any stationary, non-residential appliance, including a computer-room air conditioner, that provides cooling to a space for the purpose of cooling objects or occupants, but *excludes chillers* [emphasis added]." The Department should clarify the definition of refrigeration systems. (16)

36. COMMENT: The Department should clarify the distinction between air-conditioning appliances and chillers. The Department proposes to define air-conditioning as any stationary,

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

non-residential appliance, including computer-room air conditioner, that provides cooling to a space for the purpose of cooling objects or occupants, but excludes chillers. Yet, the Department does not include a definition of chiller. The Department should include a definition of chiller.

(38)

RESPONSE TO COMMENTS 34, 35, AND 36: Both chillers and air conditioning appliances can be used for comfort cooling. The adopted definition of “air-conditioning” means “any stationary, non-residential appliance, including a computer-room air conditioner, that provides cooling to a space for the purpose of cooling objects of occupants.” The definition expressly excludes chillers. Thus, under the rules, an air-conditioning appliance includes room air conditioning, such as window units, packaged terminal air conditioners and heat pumps, and portable air conditioners; central air conditioners (that is, ducted); non-ducted systems (both mini and multi splits); packaged rooftop units; water-source and ground-source heat pumps; and other products. A chiller, however, is not an air-conditioning appliance. Residential and light commercial air conditioning and heat pumps are often distinguished from chillers because they condition the air directly, rather than cool (or heat) water that is then used to condition air. See generally <https://www.epa.gov/snap/substitutes-chillers> and <https://ww2.arb.ca.gov/our-work/programs/california-significant-new-alternatives-policy-snap/chillers>.

Generally, chillers are air- and water-cooled. With chillers, heat is removed from a liquid through a vapor-compression or absorption refrigeration cycle. Chillers are used to cool equipment, such as MRI machines and tooling equipment, and to cool manufacturing processes, such as assembly processes. Chillers are used commercially and in industrial facilities to cool

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

fluids and dehumidify air in larger venues, such as factory floors, arenas, and larger facilities, such as hotels. Chillers can be classified by compressor type, including centrifugal and positive displacement. Centrifugal compressors, which are water-cooled, are aerodynamic or turbine type and move gas by converting kinetic energy to pressure energy. Positive displacement compressors include reciprocating, screw, and scroll compressors. Reciprocating compressors can be air-cooled or water-cooled and use cylinders with pistons acting as pumps to increase refrigerant pressure. In screw compressors, also known as rotary compressors, the gas is compressed by direct volume reduction between rotating screws. Scroll compressors are available in several designs, including single screw or twin screw. Scroll chillers can be air-cooled or water-cooled. Scroll compressors use a stationary scroll within a rotating scroll to compress refrigerant. Therefore, chillers are subject to the adopted rules, but air-conditioning appliances are excluded.

Based on the comments received, and for clarity, the Department is modifying N.J.A.C. 7:1E-1.2, Definitions, upon adoption, to include a definition of “chiller” consistent with California’s definition in its most recent amendments to its HFC phase-down program. See Final Regulation Order, <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/hfc2020/fro.pdf>.

37. COMMENT: All heating, ventilation, and air conditioning (HVAC) systems used for comfort cooling should be included in the definition of air-conditioning. (38)

RESPONSE: Since chillers can be used in HVAC systems, modifying the definition of air conditioning as suggested would exclude chillers. The Department intends that the rules require

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

reporting of high-GWP refrigerant usage from chillers; the suggested change would defeat that purpose.

Temperature Classification

38. COMMENT: The Facility Refrigeration System Report would require information about each refrigeration system, including the equipment temperature classification. The Department should clarify what is covered by the third temperature classification. (6, 17, 28, and 38)

39. COMMENT: The Department should clarify whether the third temperature classification is an inclusive default category for systems not applicable under the low and medium temperature systems, and that the Department is not seeking specific temperature classification information for these systems. (28 and 38)

RESPONSE TO COMMENTS 38 AND 39: All refrigeration systems greater than 50 pounds of charge are subject to the rules and the owner/operator must report the temperature classification of the systems in the report. This information is necessary for the Department to evaluate future potential trends for different types of equipment. The “other” temperature classification category, at N.J.A.C. 7:27E-2.3(b)10, is a catch-all category for facility refrigeration equipment that is neither low nor medium temperature. The adopted rules do not require the owner/operator to further identify equipment that falls into “other” temperature classification category. The temperature classification of the equipment does not change the applicability of reporting. To clarify the Department’s intent, the Department is modifying N.J.A.C. 7:27E-2.3(b)10 on adoption to refer to “any other temperature classification,” rather than “other.”

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Responsible Party

40. COMMENT: Many food retailers, such as supermarkets, independent grocers, and convenience stores, utilize contractors to maintain and repair their refrigeration systems, including leakage mitigation. These contractors typically keep the records on behalf of the owners. The Department should clarify the rules to allow either the owners/operators or the contractors to maintain and report the required information. This would ensure that the individuals with the most accurate and updated details about the equipment and the refrigerants are able to directly provide the required information, along with any follow up that may be needed. (12)

RESPONSE: The registration and reports that the rules require are to be submitted through the Department's online business portal at NJDEPonline.com. The rules do not specify the individual that must enter the information into the online business portal; therefore, an individual with direct knowledge, such as a consultant, contractor, and service technician, may provide the information to the Department. The facility's responsible official must certify the information, no matter who actually provides the information. The process for certification of registrations and reports is integrated into the Department's online submission process.

The owner or operator of the facility is responsible for complying with the new rules, including the recordkeeping requirements. See N.J.A.C. 7:27E-2.4. Although a contractor may maintain information about the system, the rules require the owner or operator of a registered

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

facility to maintain the records for five years at the facility and make the records available to the Department upon request.

Recordkeeping

41. COMMENT: Since the proposed rules require facilities to implement electronic reporting, the Department should confirm that the required recordkeeping may also be maintained electronically by the facilities. (12)

RESPONSE: The recordkeeping provisions at N.J.A.C. 7:27E-2.4 require an owner or operator of a registered facility to maintain the specified records for five years at the facility and make the records available to the Department upon request. The rules do not require records to be kept in a particular form. Therefore, an owner or operator may comply with the recordkeeping requirements by maintaining paper or electronic records.

42. COMMENT: The requirement to maintain records on-site is supported. However, it is critical that the Department base information requirements, including recordkeeping, on the current Federal program at 40 CFR 82 Subpart F. Facilities are already required to maintain this information, large facilities have invested in information systems designed to facilitate management of this information, and facility and commercial HVAC technicians are already trained to maintain this information. The Department has failed to demonstrate that existing information requirements contained in the Federal rules will not meet their needs and has instead opted for a program of unproven merit. (2)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

RESPONSE: As explained in the Response to Comments 25 and 26, the Department identified refrigeration systems as significant sources of greenhouse gas emissions; requiring these facilities to submit information will better inform the State's greenhouse gas inventory report. As explained in the Response to Comment 31, the EPA rescinded parts of its Refrigerant Management Program requirements, which no longer apply to HFCs. Additionally, the Federal program does not require the submission of the facility's refrigerant inventory, but requires records to be kept on-site. The Department's rules require facilities to submit their high-GWP refrigerant usage to the Department, regardless of the refrigerant's ozone depleting characteristics. The Department needs information on high-GWP refrigerants in order to inform its greenhouse gas inventory report.

Registration and reporting timing

43. COMMENT: Ninety days is not an adequate timeframe for the initial registration process for many food retailers in the State, which would need to install a recordkeeping system, conduct inventories, correct glitches, and train employees, contractors, and subcontractors on data entry. An inadequate amount of time would lead to inaccurate reporting. The Department should consider allowing two years for the initial registration process. (12)

RESPONSE: As explained in the notice of proposal Summary, the registration deadline for facilities with at least one existing refrigeration system subject to the rules is 90 days after the operative date of the rules. 53 N.J.R. at 1068. Pursuant to the Air Pollution Control Act, N.J.S.A. 26:2C-8, the rules become operative 60 days after adoption by the Commissioner.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Therefore, these facilities will have until September 19, 2022, to register. Facilities that install their first refrigeration system after June 21, 2022 (the operative date of this rulemaking), are required to register with the Department within 90 days after installation.

The rules require an owner or operator to provide only basic information to register. See the Response to Comments 27 and 28 and 29. Additionally, the owner or operator will register online through the Department's business portal at NJDEPonline.com. As provided at N.J.A.C. 7:27-2.4, an owner or operator of a registered facility shall maintain the required records. Registration triggers the recordkeeping requirements at N.J.A.C. 7:27E-2.4. Reporting is not due until April 1 of the following year. Both deadlines give the regulated community sufficient time to comply.

To assist small businesses, the Department's Small Business Assistance Program provides technical support and compliance assistance by holding annual workshops and operating a telephone hotline ((877) 753-1151) to address small business' questions related to environmental rules and submissions to the Department.

44. COMMENT: The Department should make registration valid for 10 years or for the timeframe to correspond to the next retrofit. (12)

RESPONSE: A 10-year registration period would not be consistent with five-year timeframes already established by the Department's Air Permitting Program. A five-year registration period is consistent with other renewal timeframes established within the Air Permitting Program for preconstruction air permits and air general permit registrations. The five-year record retention

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

period at N.J.A.C. 7:27E-2.4(a) is also consistent with the record retention schedules throughout the Air Pollution Control rules. The five-year period for fee adjustments pursuant to N.J.A.C. 7:27E-1.3 is similarly consistent with fee adjustment schedules already established in the Air Pollution Control rules. Additionally, the five-year registration renewal serves as an update for facility information that may have changed since initial registration. For these reasons, the registration renewal period of five years is appropriate.

45. COMMENT: To ensure the most complete and detailed information, the deadline for the initial report should be changed from 2023 to 2024. (12)

RESPONSE: The adopted rules require only limited information under the reporting requirements. A regulated facility should be able to provide the information within the timeframe of the rules.

Registration fee

46. COMMENT: The notice of proposal Summary notes that increased awareness of the presence of leaks may lead to prioritization of leak reduction. 53 N.J.R. at 1071. Food retailers already take steps to reduce their leakage for both environmental and budgetary reasons. Additionally, some grocers are transitioning to alternative non-high-GWP refrigerants, which is a lengthy and expensive process. Refrigeration maintenance and leak repair also costs hundreds of thousands of dollars. The cost of transitioning to a lower or zero GWP system could be \$500,000 per store. For these reasons, the Department should lower the registration fee to \$100.00. Some

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

owners/operators have hundreds of locations, and a \$400.00 fee per store will cost hundreds of thousands, just for registration. For this reason, the Department should also cap the total registration fees for facilities with multiple locations. (12)

RESPONSE: The Department recognizes that there are owners and operators who already take steps to identify and address leaks. Ultimately, the Department's goal in establishing the reporting program is to gather information regarding facilities with refrigeration systems subject to the rules, so that the Department can better understand the types of high-GWP refrigerants used and better quantify emissions from those sources. As explained in the notice of proposal Summary, the initial fee for registration and registration renewal of \$400.00, which covers a five-year period, is based on the Department's estimated costs of administering the new program and the number of facilities it anticipates will be subject to the new rules. 53 N.J.R. at 1068. Because registration is for a five-year period, the average annual cost is approximately \$80.00. To lower costs associated with reporting, the Department is not assessing equipment fees or fees based on the number of refrigeration systems. Instead, the registration fee is per facility, regardless of the number of refrigeration systems installed. If owners with multiple facilities were to pay a single registration fee, the Department would have to distribute the cost of the program over the number of participating companies, which would increase the registration fee. In the end, the cost to a company with a single location would significantly increase, which would be a disadvantage to small businesses.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Methane Monitoring and Reporting

General

47. COMMENT: The proposed amendments at N.J.A.C. 7:27-21 are supported. However, the impact of the proposed amendments is difficult to ascertain because of the uncertainty of how many sources would be covered. The Department estimated that there are “at least 26 facilities” that meet the 100 tons per year methane threshold, but there may be other facilities. 53 N.J.R. at 1065. Compressor stations are a significant source of harmful methane emissions, with recognized potential to emit thousands of cubic meters of gas per day. Therefore, the Department should clarify that all methane pipeline compressor stations are required to report their methane emissions. (15)

RESPONSE: Methane is an “other air contaminant” pursuant to the Air Pollution Control Act, which defines major facility, in relevant part, as a major source that has the potential to emit 100 tons per year of “any other air contaminant.” N.J.S.A. 26:2C-2. Therefore, the Department proposed, and is adopting, the 100 tons per year threshold to be consistent with the operating permit threshold for methane. 53 N.J.R. at 1065. A facility, including compressor stations and other sources, that emits or has the potential to emit, directly or indirectly, 100 tons of methane per year will be required to report those methane emissions through an emission statement to the Department annually.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Consistency with Federal Reporting

48. COMMENT: While it is appropriate to collect greenhouse gas inventory data from the fossil fuel industry, the EPA more than adequately addresses greenhouse gas monitoring through reporting. To the extent that the Department's proposed rules require submission of data that is duplicative of what is being reported to the EPA through its greenhouse gas reporting rules, the Department's rules should include an exemption for facilities already reporting this information to the EPA. (21)

49. COMMENT: Much of the information required to be reported pursuant to the proposed rules is already being reported to other agencies, boards, or authorities. Therefore, the Department should work with the industry to streamline the sharing of this information in order to avoid rules that require redundant reporting. (4, 6, 16, 17, 28, and 38)

RESPONSE TO COMMENTS 48 AND 49: The adopted rules do not duplicate the reporting requirements of the EPA or other agencies. Gas public utilities report aggregate greenhouse gas emission calculations from natural gas distribution lines to the EPA pursuant to 40 CFR Part 98, see 40 CFR 98.233, and natural gas distribution line infrastructure data to the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to 49 CFR Part 191. However, PHMSA does not require the tracking of pipeline replacement. Similarly, the EPA does not require public gas utilities to report blowdown events. The EPA requires reporting of blowdown events that exceeds 50 standard cubic feet of natural gas released from transmission systems, but not from distribution systems, as the Department's rules require. Additionally, the Department's rules require data points and relational information that groups mains and service lines by original material type with material type of the replaced or refurbished mains and service lines. Unlike the

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Federal rules, the adopted rules require reporting of leak information and any innovative efforts by the utilities to modernize their pipeline and/or utilize advanced leak detection methods.

50. COMMENT: The information reported to the EPA in accordance with 40 CFR Part 98, Subpart W, is publicly available. The Department can access this information, but if it would prefer to receive the information directly from the utility, the Department should establish a reporting format similar to the reporting format of Subpart W to minimize redundancy. (16)

51. COMMENT: The EPA requires natural gas utilities to calculate the fugitive greenhouse gas emissions from their distribution infrastructure in addition to the inventory report. To maintain consistency, the Department should develop a reporting format for both distribution infrastructure reporting and greenhouse gas emissions reporting that is in line with the EPA's existing reporting requirements. (6, 17, 28, and 38)

52. COMMENT: If the Department chooses to require the submission of only infrastructure information and not the calculation of fugitive greenhouse gas emissions from the infrastructure, as required by the EPA, the Department should use the same emission factors used in the EPA's program to avoid multiple sets of greenhouse gas emission data for each company. (38)

RESPONSE TO COMMENTS 50 THROUGH 52: Where possible, the adopted rules are consistent with Federal program definitions and reporting format(s) to lessen confusion, allow for data comparability, and allow the Department to evaluate whether it should update the State's greenhouse gas accounting methodology from this source. The Department welcomes input from

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

the regulated entities as the Department develops the reporting form for regulated entities to submit the required information.

The Department currently utilizes the same emission factors used in the EPA's program as provided in the EPA's SIT to calculate emissions from gas public utility distribution system.

The emissions factors included in the SIT are available online at

<https://www.epa.gov/statelocalenergy/state-inventory-and-projection-tool>.

Annual Reporting Threshold

53. COMMENT: The proposed 100 tons per year threshold for methane emissions is too high. The more appropriate threshold is around 25 tons. (40)

54. COMMENT: The reporting threshold should be lowered to ensure all methane sources are counted. (46)

55. COMMENT: The Department should consider lowering the threshold for methane to 25 tons per year, or as low as one ton per year. (26)

56. COMMENT: The Department should require emission reporting from all stationary sources that emit more than one ton of methane per year. (8, 19, and 26)

57. COMMENT: The Department's reporting threshold of 100 tons/year of methane emissions is too high and, therefore, does not cover all significant sources of greenhouse gases. The Department provided no explanation for this threshold. The Department should identify all natural gas infrastructure sites and their emissions if they want to make an argument to exclude some. There are likely hundreds of sites, which, in total, could emit more methane than the top

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

few that emit over 100 tons. The Department should be looking at the total problem and ensuring it is fully addressed, not just site-by-site emissions. (13, 14, 23, 29, 34, 42, and 43)

58. COMMENT: The reporting threshold of 100 tons per year is too high and is not based on any explanation. The rules do not take into account how many tons of methane are being emitted at facilities whose emissions fall below the limit or the cumulative effect of these emissions. The Department should be looking at and addressing the total problem, not just site-specific emissions. (48 and 49)

59. COMMENT: The Department must regulate facilities that emit less than 100 tons per year of methane. The Department already knows about the cumulative impacts of pollutants, including methane, especially in environmental justice communities, areas overburdened with power plants, incinerators, pipelines, and landfill. There exists real instruments that can measure different emissions. These tools must be part of all new rules for measuring methane emissions. If the Department really cares about the dangerous impacts of methane, the displacement of oxygen, the increased warming of the atmosphere and its related fires and droughts, then the Department's rules must be strengthened. (37)

60. COMMENT: The Department should require reporting on all methane emissions, not just those facilities that emit 100 tons per year, and other greenhouse gases. (1 and 10)

61. COMMENT: The proposed rules do not require fugitive emissions to be monitored and would only require facilities that emit over 100 tons per year of methane to report their emissions. This is a huge loophole that allows the other methane sources to go uncounted. (11, 34, and 46)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

RESPONSE TO COMMENTS 53 THROUGH 61: As explained in the Response to Comment 27, the Emission Statement Program establishes a periodic, comprehensive inventory of air pollutants from stationary sources in the State. As explained in the Response to Comment 47, the adopted methane reporting threshold is consistent with the operating permit threshold for methane. See N.J.A.C. 7:27-22.2(a)2. This threshold, as compared to the EPA, is a more stringent threshold for regulatory reporting. The EPA's rules at 40 CFR Part 98 establish a reporting threshold of 25,000 metric tons of CO₂e per year. The Department's methane reporting threshold of a 100 tons per year is the equivalent of 2,545 metric tons of CO₂, using the 100-GWP time horizon. Therefore, the 100 tons per year threshold is appropriate for purposes of the Statewide emissions inventory.

As explained in the notice of proposal Summary, in addition to facilities that are major sources subject to operating permits at N.J.A.C. 7:27-22, other facilities may meet the reporting threshold for methane based on their "potential to emit" methane. See 53 N.J.R. at 1065. Existing N.J.A.C. 7:27-21.1 defines "potential to emit" to include fugitive emissions and insignificant source operations. 53 N.J.R. at 1065. Therefore, the rules, as adopted, include fugitive emissions. See the Response to Comments 9 through 15 regarding natural gas systems.

62. COMMENT: The rules do not include specific standards or requirements for refineries, power plants, and other industrial facilities. Instead, the rules have a vague requirement to report if the facility is over the threshold. That is a mistake. Each facility should be targeted with a different kind of monitoring. (40)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

RESPONSE: The Department interprets the comment to refer to existing reporting requirements for facilities already subject to the Emission Statement program. As such, the comment is beyond the scope of this rulemaking. To the extent the comment refers to the new methane reporting threshold and facilities newly subject to the Emission Statement program, the Department's rules at N.J.A.C. 7:27-21 are clear in their requirements. See the Response to Comment 64 regarding Emission Statement guidance.

63. COMMENT: The proposed establishment of a methane reporting threshold is supported. However, the proposed calendar-year basis for reporting is insufficient to effect timely and enforceable mitigation actions. The Department should consider mandating a monthly methane reporting requirement for all emitting facilities regardless of age within its jurisdiction. (5)

RESPONSE: As stated in the notice of proposal Summary, the rules establish a reporting program for gas public utilities in order to better inform the Department's emissions inventory. 53 N.J.R. at 1066. The rules do not require mitigation. The Department will evaluate the data received and consider amendments through future rulemaking, as appropriate.

Monitoring requirements

64. COMMENT: The Department should consider revising the rules upon adoption to require that gas cloud imaging or similarly precise monitoring equipment be utilized to quantify the actual emissions of methane to be reported to the Department in the annual Emission Statement. Alternatively, the Department could include greater specification in Emission Statements, Table

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

3 Ranking of Methods for Quantifying Actual Emissions, or issue regulatory guidance describing what continuous monitoring systems are available and suitable for use with regard to the new reporting obligations created by the proposed rules. (24)

RESPONSE: The Department does not specify any particular technology in quantifying emissions, but rather provides guidance on ranking methodologies to quantify emissions. See Emission Statement guidance document at <https://www.state.nj.us/dep/aqm/es/guide.pdf>.

65. COMMENT: The Department should require the use of advanced leak detection systems or continuous monitoring systems to provide more accurate and reliable identification of natural gas leaks. (24)

66. COMMENT: The Department should incorporate remote sensing measurement technologies, such as satellites and aircraft-based sensors, into the proposed rules. States, such as New Mexico and Colorado, foster the adoption and approval of new detection and measurements technologies in their respective rules. New Jersey could similarly open the door to innovative and complementary satellite and aircraft-based methane measurement by including “satellite data gathering” as a leak detection method that goes beyond standard Federal requirements. See 53 N.J.R. at 1066. (5)

67. COMMENT: The Department must shift away from having facilities monitor their methane emissions because this information is unreliable. (10, 19, and 20)

68. COMMENT: The Department should not allow facilities to self-report, because there is no way to verify whether the facility is above the threshold. (40)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

69. COMMENT: Self-monitoring is a farce. (37)

70. COMMENT: There are many pipelines in the State and they often leak, which adds to the methane and other toxins in the atmosphere and raises safety concerns. Hopefully, there are enough inspectors to inspect these pipelines because companies cannot be expected to truthfully self-regulate. (1)

71. COMMENT: The Department must independently oversee methane emission monitoring and data collection. (10, 14, 15, and 23)

72. COMMENT: In order to measure greenhouse gas emissions accurately, the Department must require independent monitoring and include methane and black carbon. (20)

73. COMMENT: As written, the rules allow for self-monitoring without independent oversight, which means there is no accountability for industry. There should be an independent monitoring agency established instead. Stakeholders should be clearly defined as members from the public sector. The utility users are the true stakeholders because their user fees pay for maintenance and new infrastructure. (3)

74. COMMENT: There are no provisions in this rulemaking for any oversight and inspection testing by the State. The Department must have a way of physically verifying the methane and other greenhouse gas emissions. (13, 23, and 42)

75. COMMENT: Allowing industry to self-report their greenhouse gas emissions is extremely concerning. The rules should include oversight by the State to physically verify the reported values for methane and other emissions. (48 and 49)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

76. COMMENT: The Department should not rely on reporting from the sources of emissions. There must be independent oversight. The Department should use infrared cameras and aerial overhead monitoring to monitor and verify emissions. (43)

77. COMMENT: The source of emissions is reporting its own emissions. The Department should implement an on-site testing and verification program. (10 and 23)

78. COMMENT: The Department should not rely solely on companies to self-report emissions because of their self-interest. (46)

79. COMMENT: The proposed rules fail to provide adequate Department oversight to ensure that greenhouse gases are being accurately measured and reported by the polluters who are emitting them. (34)

80. COMMENT: Oversight, inspection, and testing should include methane detectors in all of the Department's current air pollution/greenhouse gas monitors, additional monitors for methane at known hot spots that continue to leak or have high probability of leaking, one or more mobile testing facilities that can be moved to any such suspected sites, and a visual testing and verification program. Further, the Department should mandate that all facilities that source, process, and transmit natural gas include a multi-faceted, real-time methane emissions measuring and monitoring capability, including fixed air station monitors for methane, as well as implementation of FLIR infrared cameras. These emissions measures should be provided to the public as real time emissions data, perhaps centralized at the Department's website. (14 and 48)

81. COMMENT: The Department's DataMiner program is inadequate for tracking methane emissions. It has no category for methane facilities. While New Jersey receives more than half

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

of its total electric power from burning natural gas, DataMiner only tracks four sites that emit methane. This void must be rectified to capture virtually all methane emissions in the State, including those of gas compressor stations, whether under the Board of Public Utilities' (BPU) control or not. (14 and 49)

82. COMMENT: The Department should create an aggressive natural gas emissions audit and verification department focused solely on tracking, auditing, and verifying emissions from natural gas facilities (transmission and distribution) and natural gas power plants. The Department should perform random audits and use state-of-the-art greenhouse gas detection tools as well as using satellite services. (8, 19, and 26)

83. COMMENT: The Department must have strong enforcement requirements for facilities with methane emissions, which includes random audits, data verification, using FLIR cameras, arial imagery, satellite imagery, fixed air monitors for inspections, and strict penalties for noncompliance. (26)

84. COMMENT: The Department's effort to mitigate climate change impacts must begin with reliable data. The proposed rules would allow facilities that report to the EPA to avoid directly reporting their methane emissions to the Department. However, the EPA's data does not appear to be available to the Department, when needed, and the Department should not solely rely on the EPA's data. Data used by the Department must be real, comprehensive, and verified.

To phase-out the State's reliance on natural gas, the proposed rules must require, gather, and verify real data from all methane emitters, which should be posted once a month on a site accessible to the public. The proposed rules should include more specific requirements for

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

measuring and monitoring methane emissions at all sources. Calculating methane emissions using facility-provided data and the EPA-derived equations lead to an inaccurate base point, because modeling is not measuring. The rules should include clearly defined methods for landfill operators to measure and report methane emissions. The Department should also require on-site monitoring at all natural gas facilities to generate more robust and reliable data. This should be through fixed air station monitors for methane as well as forward looking infrared (FLIR) cameras that point directly at the facility's unit(s). These tools should also be used for inspections. The Department should require the use of actual tools available for onsite- and satellite-based audits of all natural gas facilities, including transmission and distribution, and natural gas power plants. (10)

85. COMMENT: The rules do not monitor methane in all the necessary places. Methane is not always emitted from a smokestack. The rules should improve the State's ambient air pollution monitoring system to include methane, especially in high-traffic, high-volume areas of pollution, such as Port Newark and Linden. For example, California uses aerial satellite imagery to identify hot spots of methane, and then they install specific monitoring for methane in those areas. (40)

86. COMMENT: The Department should monitor and audit inventory reporting, using satellite services and unscheduled inspections utilizing FLIR cameras and portable air monitors during peak load periods. (11 and 50)

87. COMMENT: The Department should create a task force that monitors emissions, independently showcasing notifications of methane emissions to enforce emissions reductions.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

The Department should require monitoring at sources that may purport to emit less methane, such as electric compressor stations. Data must be independently controlled. It does not make sense for emitters to monitor and report their own emissions. Communities should feel empowered to help create and update the data. The Department should require all fossil fuel supply chains to install multi-faceted methane emissions mechanisms, such as FLIR cameras, providing real time measurements on all sites for the public. (11)

88. COMMENT: Public reporting of methane monitoring should be done in real-time. (19)

RESPONSE TO COMMENTS 65 THROUGH 88: The adopted rules do not require specific monitoring, such as advanced leak detection or continuous monitoring systems, as part of a gas public utility's reporting requirements at N.J.A.C. 7:27E-3. However, the rules do require gas public utilities to provide information about leak detection methods that go beyond the standard Federal requirements at 49 CFR Part 192, Subpart M, such as satellite data gathering for methane detection and measurement. See 53 N.J.R. at 1066. The rules require gas public utilities to report information that includes miles of mains, number of services lines, and material types. The Department will evaluate this information to inform future regulatory actions.

For facilities subject to the Emission Statement Program, the Department's existing rules require monitoring, inspection, and verification of emissions, as specified at N.J.A.C. 7:27-21.2, 21.3, and 21.5. Facilities subject to the Emission Statement program rules are required to report specified pollutant emissions, whether they come from a stack or fugitive source. The Department will verify the reports through periodic stack testing, inspection, and enforcement

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

review. Facilities that exceed permit limits or fail to adequately report emissions are subject to enforcement and penalties.

The Department uses methane detection tools, which include FLIR cameras, aerial imagery, satellite imagery, and fixed air monitors, to monitor and detect methane emissions. However, these tools do not replace a facility's own emission data collection. The Emission Statement program verifies the methodology a facility is using to calculate emissions and the accuracy of the submitted Emission Statement, and the facility certifies that the Emission Statement is accurate and true. The Department conducts site inspections to verify the accuracy of reported information.

Owners and operators that violate the rules are subject to the enforcement and penalty provisions at N.J.A.C. 7:27A-3.2, 3.5, and 3.10.

89. COMMENT: While the rules add a process for estimating fugitive methane leaks it still falls short. The Department should include estimates of the methane leaks from pipeline owners not under the jurisdiction of the Board of Public Utilities (BPU), such as owners of pipelines that only traverse the State, as part of its inventory, so that offsetting cuts in greenhouse gas emissions elsewhere in the State can effectively reduce real greenhouse gas emissions. The Department should work with those companies to determine sources and volumes of fugitive leaks, or leaks due to other factors, and have them corrected. Since emissions are estimated, the Department should be able to go back a number of years and compute historical fugitive

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

emissions and add them to the historical inventory in order to have a more accurate view of total greenhouse gas emissions. (14).

RESPONSE: As explained in the Response to Comments 9 through 15, the Department obtains emissions information that sources report to the Emission Statement program and to the EPA. The Department also utilizes the EPA's SIT, which calculates estimated methane emissions from the natural gas transmission system. These resources enable the Department to substantially monitor emissions from transmission facilities and pipelines. The Department will continue to use this methodology to quantify methane emissions from transmission pipelines and appurtenances in future greenhouse gas emission inventory reports.

90. COMMENT: The Department should include methane monitoring in the State's ambient air pollution monitoring system. (40)

RESPONSE: Ambient air monitoring is used to monitor and track emission trends for National Ambient Air Quality Standards and air toxics. Adding methane to ambient air monitoring is beyond the scope of this rulemaking.

Reporting Requirements

Information regarding distribution mains and service lines

91. COMMENT: In addition to requiring reporting on pipeline material, the Department should also require information on the age of mains and services lines. Peer-reviewed research has identified a clear interaction between pipeline material and age, with the leakiness of all material

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

types increasing with age. The study's modeling found that pipe age, material, and their interaction affect the leak indication rate, with the interaction being an important predictor of leak activity. Thus, requiring this reporting will enhance understanding of leak information, as well as tracking of presence of older leak-prone pipes. (31)

RESPONSE: The Department agrees that pipeline age, meaning the year of installation, could enhance the quality of the information on pipeline performance and integrity over time. The Department will evaluate the information reported and consider amending the rules to obtain additional information about the mains and service lines in the State, if deemed useful and necessary.

92. COMMENT: In the notice of proposal Summary, the Department states that "Proposed N.J.A.C. 7:27E-3.1(b)1 and 2 require each gas public utility to identify, as part of its report, any mains and service lines in the State that were *added* to its distribution system, replaced, or refurbished during the reporting year." 53 N.J.R. at 1066. This phrasing suggests that the Department also intends to require gas utilities to report on new mains and services that are added to the system—that is, an expansion of the existing distribution system—but there is no such requirement stated in the proposed regulatory language. The Department should require gas utilities to report on the miles of mains and number of services that are added to its system, as well as those that are retired from its system each year. This information will improve greenhouse gas emission calculations. Moreover, to achieve the State's climate goals, the State must reduce its reliance on natural gas. Requiring information about new and retired pipelines

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

will help the Department understand the changing dynamics of the State's gas distribution systems. (31)

RESPONSE: The Department explained in the notice of proposal Summary, 53 N.J.R. at 1066, that N.J.A.C. 7:27E-3.1 requires each gas public utility to identify any mains and service lines in the State that were added to its distribution system. However, proposed N.J.A.C. 7:27E-3.1 did not include this requirement. The Department is, therefore, modifying the rule upon adoption to correct this oversight. Consistent with the information required for replaced or refurbished mains and service lines, adopted N.J.A.C. 7:27E-3.1(b)2 requires utilities to provide information based on miles of mains and number of service lines added, grouped by material type for each.

As discussed in the Response to Comment 91, the Department will evaluate the information reported and consider amending the rules to obtain additional information about the mains and service lines in the State.

Information regarding leaks and advanced leak detection

93. COMMENT: If a gas utility is conducting advanced leak detection technology and data analytics in another capacity, such as part of a settlement that may yield relevant emissions information, such as to prioritize replacement or retirement of leak-prone pipe segments, the Department should invite utilities to submit those results as an attachment to their Pipeline Modernization Reports. This could yield helpful information sharing about best practices to improve leak identification and methane emissions monitoring. (31)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

RESPONSE: Adopted N.J.A.C. 7:27E-3.1(b)4 requires gas public utilities to include in the Pipeline Modernization Report leak detection practices that exceed the minimum Federal requirements at 49 CFR Part 192, Subpart M, if applicable. Among the information to be submitted are leak prevention and reduction efforts, regardless of why the utility is undertaking such efforts. Therefore, the rules already provide for utilities to submit results of advanced leak detection technology and data analytics that they are conducting. The Department will analyze the additional leak detection information collected in order to inform future efforts to reduce methane emissions.

94. COMMENT: The Department should add a requirement for gas utilities to report methane leak flow rates for individual leaks and the systemwide emissions rate, if available. Leak flow rate is the volume of methane emissions released from a given leak per unit of time. Gas utilities can measure the leak flow rate for individual leaks on their system by using advanced leak detection and data analytics. This information allows utilities to prioritize leak remediation efforts based on the size of the leak. This information also allows utilities and regulators to understand the scope of methane emissions attributable to a leak over time. This information is particularly valuable to understand the climate impact of leaks that utilities allow to remain for a prolonged period of time, which is a known practice for non-hazardous leaks. A few “super-emitter” leaks are responsible for a significant proportion of the leakage from gas distribution systems, making it essential for utilities to identify and address these leaks to quantify and reduce methane emissions. If a utility is conducting systemwide advanced leak detection surveys, the

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

utility should be able to estimate a systemwide methane emission rate that is based on direct measurement, rather than emission factor estimates. Research and operator experience have demonstrated that direct measurement is a more effective way to calculate and track methane emissions, compared to calculations based on pipeline mileage and emission factors. Gas utilities estimate and report their greenhouse emissions to the EPA using the EPA Subpart W emission factors, which are emission estimates per mile of pipeline main, by material, averaged from samples taken in limited studies across the nation. This accounting is not the most accurate method available in this context, because the emission factors were developed using leak inventories that relied on traditional leak detection technology that finds far fewer leaks than advanced leak detection. The Department should require gas utilities to report methane leak flow rates for individual leaks, if available through advanced leak detection, and method by which the leak was identified.

Gas utilities may not have uniform leak flow rate data or any such data to report, since New Jersey agencies have not yet established specific guidelines for the use of advanced leak detection and data analytics for leak surveys. Therefore, the Department should add this requirement. The Department should add such items to its reporting requirements on an “if available” basis. Incorporating these categories now would be a forward-thinking step, particularly as the Department considers next steps to develop standards to reduce greenhouse gas emissions from sources such as gas pipelines. (31)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

95. COMMENT: Leak reporting requirements set forth in the proposed rules are preempted by a comprehensive Federal regulatory scheme and are overly vague in that public utilities are required to report pursuant to unclear and undefined “general industry standards.” (16)

RESPONSE TO COMMENTS 94 AND 95: As explained in the notice of proposal Summary, the rules require each gas public utility to report information about leaks. See 53 N.J.R. at 1066. The Department specifies the type of information that must be reported from gas public utilities at N.J.A.C. 7:27E-3.1(b)3i through viii. This includes leak information from traditional leak surveys as required at 49 CFR Part 192, Subpart M, and those leak surveys that use leak detection systems that go beyond the Federal requirements at 49 CFR Part 192, Subpart M. The rules do not require gas public utilities to exceed traditional leak detection surveys required pursuant to 49 CFR Part 192, Subpart M, as explained in the Response to Comment 96.

The purpose of the rules is for the Department to obtain specific leak information to better understand methane emissions from distribution lines in the State. See 53 N.J.R. at 1063, 1066. The Department is modifying N.J.A.C. 7:27E-3.1(b)3 upon adoption to require the gas public utility to report for each leak the method by which the leak was detected, and leak flow rate, if known, consistent with the purpose of the rules. See N.J.A.C. 7:27E-3.1(b)3viii. Because the rules require the gas public utility to report leak information, the gas public utility should know how the leak was detected. Additionally, the rules require each gas public utility to include information about leak detection methods that go beyond standard Federal requirements. If the utility uses advanced leak detection that enables it to know the volume of methane emissions released, per unit of time, otherwise known as the methane leak flow rate, the utility

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

will be able to report this information. The Department does not expect requiring this information, which will be on an “as known” basis, to be an additional burden on gas public utilities.

96. COMMENT: If the Department’s rules do not require advanced leak detection technology, the Department should include incentives for facilities that use advanced leak detection systems. For example, the Department could consider fee waivers in cases where advanced monitoring is utilized on the basis of the higher quality information being provided to the State concerning the occurrence, size, and scope of methane releases from public utilities. (24)

RESPONSE: The rules, at N.J.A.C. 7:27E-3.1, require reporting on the use of advanced leak detection by public gas utilities as part of their innovative and voluntary emission reduction efforts. However, N.J.A.C. 7:27E does not require the use of advanced leak detection. The Department will analyze information on the use of advanced monitoring and leak detection technologies collected in the Pipeline Modernization Report to inform future efforts to reduce methane emissions.

Waiving the reporting fee at N.J.A.C. 7:27E-3.3 for public gas utilities that use advanced monitoring capabilities would cause the Department to transfer the cost of this program to other entities. The Department’s costs were estimated based on the resources needed to administer the processing, analyzing, and data storage of the information in the Pipeline Modernization Report. Facilities that use advanced monitoring and leak detection technologies, are not exempt from the reporting requirements at N.J.A.C. 7:27E-3.1, nor do they require fewer resources from the

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Department in administering the processing, analyzing, and data storage of the report's information.

97. COMMENT: The Department proposed to incorporate the Grade 1, 2, and 3 definitions into its reporting framework. However, these terms are not designed to address climate pollution. Instead, they are designed to categorize leaks based on their hazard, which is important for gas utility safety practices and serves an important purpose. Therefore, in addition to these leak categories, the Department should establish new leak climate categories. The Department could include three climate categories: urgent, for leaks over 10 standard cubic feet per hour (scfh); actionable, for leaks one through 10 scfh; and negligible for leaks below one scfh. This would facilitate greenhouse gas emission reporting and gas utilities' incorporation of climate considerations into their leak management practices. Requiring utilities to report both the safety grade and the climate category of each leak in their Pipeline Modernization Report would facilitate better understanding of the relative distribution of hazardous leaks and climate urgent leaks. To the extent that gas utilities do not know the climate categorization of their leaks, the Department could designate this as an "if available" reporting requirement. (31)

RESPONSE: The climate categorization based on varying levels of leak rates can be determined from leak flow rates of individual leaks data. Further identification of individual leaks by Climate Category would be duplicative of the data submitted.

98. COMMENT: The proposed rules require gas public utilities to include information regarding leak identification for leaks that have a leak grade classification of grade 1, 2, or 3 in the Pipeline

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Modernization Report. The PHMSA requires natural gas distribution operators to submit annual reports that include information, such as total pipeline mileage (mains and services), miles by material, and total leaks classified by cause. Natural gas distribution operators submit the required data using Form PHMSA F 7100. To maintain consistency, the Department should develop a reporting format consistent with Form PHMSA F 7100. (6, 17, 28, and 38)

99. COMMENT: To maintain consistency with the PHMSA's requirements, the Department should develop a reporting format in line with Form PHMSA F 7100. (4)

100. COMMENT: Leak reporting is preempted by Federal law, which requires such reporting through the PHMSA's Annual Gas Distribution Report. The Department's proposed rules require leak reporting but relies on unclear industry standards. Since the information utilities report to the PHMSA is publicly disclosed and available on the PHMSA website. If the Department needs this information directly from a natural gas utility, the Department could simply require public utilities to forward a copy of the completed PHMSA reporting to the Department. (16)

101. COMMENT: To ensure reporting requirements are consistent and to ensure accuracy of reporting, the Department should define the grade classifications within the rules in accordance with the regulations implemented by the PHMSA. Additionally, the Department should clarify whether emissions will be calculated based on leak grade classification information or otherwise. (6 and 17)

102. COMMENT: Though the definitions of grade 1, 2 and 3 leaks at proposed N.J.A.C. 7:27E-1.2 are consistent with the grade classifications as defined by the regulations implemented by the

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

PHMSA, the Department should define the grade classifications within the Department's rules in accordance with the regulations implemented by PHMSA. (38)

103. COMMENT: The definitions of grade 1, 2 and 3 leaks at proposed N.J.A.C. 7:27E-1.2 are consistent with the grade classifications as defined by the regulations implemented by the PHMSA. If the Department plans to use the leak grade classification information to estimate emission levels, the Department should seek input from the utilities. (28)

104. COMMENT: The proposed rules do not detail required methods for pipeline leak detection. Nor do they require public reporting and/or publicizing responses to reports of suspected leaks by the public and/or municipalities. The Department's proposed leak categorization should include a more robust system for leak detection, reporting, and follow-up, to ensure accountability and future reduction of methane emissions. (10)

RESPONSE TO COMMENTS 98 THROUGH 104: As explained in the notice of proposal Summary, the leak grade definitions are consistent with general industry standards. See 53 N.J.R. at 1066. The Department will use the leak grade classification information along with the latitude and longitude information provided by the utilities to qualitatively report on geospatial and grading information of each leak. The Department will not use leak grade classification to calculate natural gas flow rates from those leaks.

As discussed in the Response to Comments 94 and 95 regarding leaks and leak flow rates, the Department is modifying the rules upon adoption to require natural gas utilities to report the leak flow rate of individual leaks, to the extent that information is already available to the utility. See N.J.A.C. 7:27E-3.1(b)3.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Blowdown events

105. COMMENT: The Department should allow flexibility in the emission factors used to track and report emission calculations. For example, the Department's rules could allow for the use of company-specific factors other than those in Subpart W, or company-specific emission factors, if available, for tracking and reporting emissions reductions. (6, 17, and 28)

RESPONSE: As explained in the notice of proposal Summary, 53 N.J.R. at 1066, the amount of natural gas released is to be calculated using one of the two methodologies set forth in the Federal rules. This requirement is to maintain consistency. The Department will not accept company-specific emission factors when reporting systemwide greenhouse gas emissions.

106. COMMENT: The proposed rules require gas public utilities to include information about each blowdown event that exceeds 50 scf of natural gas released. This requirement goes beyond the EPA's reporting threshold. (6, 17, 28, and 38)

107. COMMENT: Collecting the data necessary to comply with the requirement to include information about each blowdown event that exceeds 50 scf of natural gas released would require a significant level of effort and cost. (6, 16, 17, and 38)

108. COMMENT: Collecting the data necessary to comply with the requirement to include information about each blowdown event that exceeds 50 scf of natural gas will likely result in reported levels of emissions that are *de minimis*. (6, 17, and 38)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

109. COMMENT: The Department should eliminate the requirement to include information about each blowdown event that exceeds 50 scf of natural gas released due to the *de minimus* emissions that would be reported and the fact that any discrepancies in data reported to the EPA and the Department might cause confusion. (38)

110. COMMENT: If the Department believes that monitoring and reporting of blowdown emissions are necessary to quantify the inventory of greenhouse gas emissions, the Department should include a sunset provision within the rules if the Department determines that level of blowdown emissions is *de minimis*. (6, 17, 28, and 38)

111. COMMENT: When calculating the volume of emissions reductions from these avoided blowdowns, New Jersey Natural Gas uses engineering calculations that are specific to its systems. If the Department's rules impose a standardized measurement for blowdowns, it could lead to inaccurate data on gas volumes. (16)

RESPONSE TO COMMENTS 106 THROUGH 111: The Department determined that there is a reporting gap in methane emissions from gas public utilities in quantifying maintenance venting events, referred to as blowdown events, which contribute to the State's methane emissions.

When a natural gas transmission line experiences a blowdown in excess of 50 standard cubic feet (scf), the blowdown event emission information is reported to the EPA in accordance with Federal rules at 40 CFR Part 98. However, the EPA does not require similar reporting for distribution lines. N.J.A.C. 7:27E-3.1(b)5 applies the same emissions reporting threshold on blowdowns from the transmission lines that apply to the distribution lines. This will help the Department gather information on venting events performed by utilities, which is currently

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

unavailable. The Department will analyze the information collected at N.J.A.C. 7:27E-3.1(b)5 to determine if requiring reporting of blowdown events from distribution systems is warranted in the future.

Other

112. COMMENT: The Department should require all natural gas facilities to notify the Department prior to any planned methane emission events and within 48 hours after any unplanned events of all methane emissions. (19)

RESPONSE: As explained in the Response to Comments 106 through 111, the Department determined there is a reporting gap in methane emissions from gas utility distribution line blowdown events. The new rules at N.J.A.C. 7:27-3, therefore, require gas public utilities to report these events in excess of 50 scf. To utilize this information for the Department's emissions inventory report, which is the purpose of the rules, the Department does not require notification of planned events or notice within 48-hours after an unplanned event. For emergencies, the Air Pollution Control Act (APCA) requires that a person who causes a release of air contaminants in a quantity or concentration that poses a potential threat to public health, welfare, or the environment or that might reasonably result in citizen complaints shall immediately notify the Department. N.J.S.A. 26:2C-19.e. Any person who fails to notify the Department is subject to enforcement, including penalties. See N.J.S.A. 26:2C-19; N.J.A.C. 7:27A-3.11.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Report submission deadline

113. COMMENT: The proposed rules would require gas public utilities to submit the Pipeline Modernization Report on or before April 1 of each calendar year. The April 1 timeframe falls in the midst of utilities submitting reports to numerous Federal and State agencies. To maintain consistency and allow time to complete related reporting submissions, the utilities recommend the submission date be moved from April 1 to June 15. (4, 6, 16, 17, 28, and 38)

RESPONSE: In recognition of the burden that an April 1 deadline places on the regulated community, in light of the other reporting deadlines, the Department is modifying N.J.A.C. 7:27E-3.1 upon adoption to require the submission of the Pipeline Modernization Report on or before June 15. See modified N.J.A.C. 7:27E-3.1(a)1 and 2. The June 15 deadline (annually) will not delay the Department's generation of the emissions inventory reports because other Federal data is not available until the summer or fall of each year.

Enforcement and Penalties

114. COMMENT: The penalties for violations of the proposed rules for greenhouse gas monitoring and reporting are too low to deter violations. (10, 11, 13, 14, 23, and 40)

115. COMMENT: The Department should have strict reporting penalties, such that if any facility owner fails to report emissions or fails to meet accurate emissions from audits, the facility owner would be required to install fixed air monitors and FLIR cameras and publish that data on a publicly available website. (11, 19, and 50)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

116. COMMENT: The rules do not include serious penalties. The Department needs to impose progressive penalties and greater penalties on the larger emitters, in order to incentivize reductions in emissions. (43)

117. COMMENT: The Department should consider making the penalty a percentage of each entity's revenue or profit, so that larger violators pay considerably more than small violators. (11, 14, and 23)

118. COMMENT: The Department must strictly enforce regulations with strict penalties for the regulations to be effective. (37)

119. COMMENT: The proposed rules will not meaningfully deter violations. (3 and 34)

120. COMMENT: The penalties should be high enough to really make companies accountable for their emissions. These penalties should be used to restore the damage already caused and invest in infrastructure necessary to shift to a 100 percent renewable energy State by 2050. (18)

RESPONSE TO COMMENTS 114 THROUGH 120: As stated in the notice of proposal Summary, the Department included civil administrative penalties for violations of the requirements of N.J.A.C. 7:27E, "consistent with existing penalties for similar violations of other Department rules." 53 N.J.R. at 1070. As examples, the refrigeration system registration requirement at N.J.A.C. 7:27E-2.1 and the facility refrigeration system report submission requirement at N.J.A.C. 7:27E-2.3 are similar to the release and pollution prevention report submission requirement at N.J.A.C. 7:1G-7.7(c)1. The requirements to submit a pipeline modernization report and for subsequent recordkeeping at N.J.A.C. 7:27E-3.1 are similar to N.J.A.C. 7:27-16.18(j)2 for VOC leak reporting requirements. Civil administrative penalties

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

should be consistent for similar violations, with designations as “minor” and “non-minor” pursuant to the Grace Period Law, N.J.S.A. 13:1D-125 through 133, similarly consistent. There are multipliers within the penalty schedule should the violation continue or become a repeat offense. The Department is, therefore, adopting the civil administrative penalties as proposed.

Miscellaneous

General

121. COMMENT: The proposed rules include a general description of the information required, but a specific format/sample forms are not included in the rulemaking. Much of this information is currently being submitted to other Federal and/or State agencies. Maintaining consistency in the levels of greenhouse emissions reported to the various State and Federal agencies is a priority. To avoid discrepancies, the Department should work with the impacted industrial groups and allow for comments/feedback on draft submission forms. (38)

RESPONSE: As stated in the Response to Comments 50, 51, and 52, the Department welcomes input on the Pipeline Modernization Report format from the regulated entities. However, for refrigeration system reports required at N.J.A.C. 7:27E-2, the Department will process the refrigeration system reports through the Department’s online business portal at NJDEPonline.com and store the reports on the Department’s existing database. 53 N.J.R. at 1069.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

State Climate Action

122. COMMENT: The pace of climate change requires immediate action and deep reductions in greenhouse gas emissions if we are to mitigate the effects of climate change. (3, 8, 9, 10, 11, 14, 19, 20, 22, 23, 26, 30, 40, and 45)

123. COMMENT: Aggressive action is needed to stop climate change and protect the State's forests from the types of wildfires happening on the West Coast. (7)

124. COMMENT: Monitoring greenhouse gas emissions in the State is important, but the Department has enough data now to set a more aggressive greenhouse gas reduction timetable for the State. The Department should accelerate the goal to reduce carbon emission by 50 percent by 2030. (25)

125. COMMENT: There is a climate crisis and consumption of fossil fuels must be cut at emergency speed. The State cannot curb climate change if it continues to allow more pipelines, compressor stations, and gas-fired power plants to be built. These facilities add more greenhouse gases to the atmosphere. (1)

126. COMMENT: There is no more time to waste to slow down climate change. Action is needed now, and everyone must participate. Strong policies, rules, and laws are necessary for this to happen. Making companies accountable for their emissions is the first and most basic step that is needed for the State to reach its 80x50 goal and use 100 percent renewable energy by 2050. (18)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

127. COMMENT: Deep cuts in greenhouse gas emissions are needed by 2030. The State needs a plan to reduce greenhouse gas emissions by 45 to 50 percent. These rules only measure emissions, they do not reduce emissions. (13)

128. COMMENT: The climate science indicates that we need a 50 percent cut in greenhouse gas emissions by 2030 and 80 percent cut by 2050. (35)

129. COMMENT: The Department identified New Jersey as ground zero for climate impacts, especially for temperature, sea level rise, and overburdened communities. Therefore, the Department must publish planned reductions from present levels of greenhouse gas emissions, so that the State can meet its goals along the way. (43)

130. COMMENT: The Department must protect New Jersey residents from the climate crisis by taking immediate action to aggressively reduce greenhouse gas emissions. These actions should include progressive goals to reduce the percentage of greenhouse gas emissions across all sectors, beginning at five percent in 2025, and increasing to a 100 percent reduction in greenhouse gas emissions from all sectors by 2050. These mandated reductions in emissions must be aggressively enforced with an actual emission inventory, as well as fines and other consequences for violators. (19)

131. COMMENT: The Department should reorganize staff to create a dedicated team for assessing climate change, threats, and health impacts from greenhouse gas emissions. The dedicated team would also provide a monthly climate threat analysis, prioritize Department remediations, work with the New Jersey Interagency Council on Climate Resilience, and continually reassesses threats as New Jersey is impacted from both outside New Jersey emissions

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

and inside New Jersey emissions. Additionally, the Department should create an aggressive 20-year greenhouse gas emissions reduction program plan by December 1, 2021. The Department should start monthly metrics and reporting to the public by January 1, 2022, producing a monthly report card that includes key performance indicators in the following categories: greenhouse gas emissions, inventory status, stationary source status, audit, and staffing/budget resource allocations. (8, 19, and 26)

132. COMMENT: The State, including the Department with the proposed rules, is not doing enough fast enough. (44 and 46)

133 COMMENT: Together with CO₂, methane and halogen gases are greenhouse gases that are causing climate change. Methane gas is a very dangerous gas that pollutes the air we breathe, the water we drink, and the food we eat. New research suggests that methane leakage during the extraction and distribution of natural gas might be undermining the potential to reduce global warming emissions by using natural gas in place of higher carbon fossil fuels, such as coal and oil. Therefore, the Department should hold all natural gas companies, from production to distribution, accountable for their pollution. New horizontal drilling and hydraulic fracking have allowed the natural gas and oil pollution to expand over the past decade and raised new questions about the impacts that natural gas extraction and associated methane leaks will have on climate change, public health and safety, land and water resources, and people. This expansion is currently outpacing our capacity to understand and manage the risks. (18)

RESPONSE TO COMMENTS 122 THROUGH 133: The Department agrees that action must be taken to mitigate climate change. As the Department noted in the notice of proposal Summary

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

and the various impact statements, particularly the Environmental Impact Statement, the adopted rules are among the initial steps the Department will take to address greenhouse gas emissions that are driving climate change. Although the reporting requirements do not require emissions reductions, the Department expects a positive environmental impact as the reported information will provide more reliable baseline emissions estimates of these greenhouse gases, which will better inform climate policies. The Department expects additional environmental benefits through increased awareness of system issues, such as leaks, by requiring owners and operators to report information about refrigerants used and gas public utilities to report about their distribution lines. 53 N.J.R. at 1071.

Interim Benchmarks

134. COMMENT: The Department should establish interim benchmarks that will hold New Jersey accountable to achieving emission reductions. (1, 9, 13, 14, 20, 23, 26, 30, and 40)

135. COMMENT: The Department should set benchmarks between now and 2030, as well as 2050. (43)

136. COMMENT: The Department should set an interim benchmark of 50 percent reductions in greenhouse gas emissions by 2030, which would match the goal of the Biden Administration.

Without an interim goal, new fossil fuel projects could be built ahead of 2050, resulting in the same level of or even an increase in emissions of methane and black carbon before the 2050 date.

(32)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

137. COMMENT: The proposed rules do not mention interim benchmarks or milestones, informal or otherwise, with respect to greenhouse gas emissions reductions. (11)

138. COMMENT: The Department should create an aggressive 20-year greenhouse gas emissions reduction program plan by December 1, 2021. (26)

139. COMMENT: The Department has sufficient information to set a goal of 50 percent reduction of greenhouse gas emissions by 2030. (45)

140. COMMENT: The proposed rules are an important first step in combating climate change, but will not generate immediate greenhouse gas emissions reductions. The Department should set a goal of 50 percent reduction in greenhouse gas emissions by 2030. (36)

RESPONSE TO COMMENTS 134 THROUGH 140: Interim benchmarks are outside the scope of this rulemaking. Pursuant to Executive Order No. 274 (2021), and consistent with the GWRA amendments of 2019, Governor Murphy established an interim benchmark for reducing greenhouse gas emissions to 50 percent below 2006 levels by 2030, referred to as the “50x30 goal.” The Department will continue to consider the role of benchmark codification in advancing the State’s climate policy objectives.

Environmental Justice

141. COMMENT: Though the State has a goal to reduce emissions of greenhouse gases, there are still plants and fracking stations being built in New Jersey. These facilities disproportionately impact communities of color and those in the socioeconomic lower quadrant. The toxins and co-pollutants, like the oxides of nitrogen (NO_x) gases, linger in nearby

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

communities leading to serious health problems for the people that live near the facilities. A disproportionate number of these facilities are concentrated in some of the more socioeconomically and environmentally disadvantaged communities in the State. It is time to include and educate the residents of New Jersey who are truly impacted. (22)

142. COMMENT: Doing the bare minimum should not be an option when it comes to air quality, renewable energy power investments, water conservation, or green infrastructure investments in the State. Greenhouse gas emissions, including black carbon, have been shown to ramp up diseases in all humans in proximity, historically, in communities of color or people who have low income. (11)

143. COMMENT: Communities with multiple polluting facilities will not have their emissions accounted for in the cumulative, even though communities of color and/or low income are affected the most. The Department did not mention environmental justice communities where the compounded impacts from greenhouse gas emissions, including methane and black carbon, should be considered in the aggregate, and not merely for isolated facilities. The Department should include a plan to assess compounded emissions in areas with a concentration of polluting industrial facilities, especially in environmental justice communities. The Department should also include in its emissions inventory for the State and in environmental justice communities, methane emissions from interstate transmission lines, as reported to FERC. (10)

RESPONSE TO COMMENTS 141, 142, AND 143: These comments are beyond the scope of this rulemaking, which establishes a greenhouse gas monitoring and reporting program.

However, the Department acknowledges the commenters' concerns regarding impact of

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

pollution on overburdened communities. The Department is separately undertaking rulemaking to implement N.J.S.A. 13:1D-157 et seq. (the “Environmental Justice Law”).

144. COMMENT: Virtual hearings should continue in the future to increase accessibility.

Hopefully, there are more opportunities for frontline communities to engage in hearings, so that communities which are burdened unfairly with pollution, specifically greenhouse gas and particulate pollution, can speak on these issues. (30)

RESPONSE: The Department acknowledges the commenters’ support of the public hearing process for rulemaking and the adaptation of this process to be held virtually.

Summary of Agency-Initiated Changes:

The Department is modifying N.J.A.C. 7:27E-2.3(b)17 upon adoption to clarify that an owner or operator is to report the total weight in pounds of “each type of” high-GWP refrigerant that was shipped by the facility during the reporting period to be reclaimed or destroyed.

The Department is similarly modifying N.J.A.C. 7:27E-3.1(b)3 upon adoption to clarify that the Pipeline Modernization Report requires the identification of “each” leak from pipeline components that have a leak grade classification ranked as grade 1, 2, or 3.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Federal Standards Statement

N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c. 65) requires State agencies that adopt, readopt, or amend State rules that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis. The Department is amending N.J.A.C. 7:27-21 to add a reporting threshold for methane. The Department is also adopting new rules to require gas public utilities with local distribution lines in the State to report information regarding their in-State mains and service lines and blowdown events for these lines. The Department has determined that there are no comparable Federal standards or requirements. Therefore, a Federal standards analysis is not required.

The Department is also adopting new rules to require owners or operators of a facility with a refrigeration system that requires 50 pounds or more of a high-GWP refrigerant to register and report information about their equipment and high-GWP refrigerants used. Federal regulations require owners and operators of appliances normally containing 50 or more pounds of a refrigerant that is an ozone-depleting substance, including CFCs and HCFCs, to maintain records as part of the Federal leak management program. See 40 CFR Part 82. N.J.A.C. 7:27E-2 requires owners and operators of a refrigeration system that requires 50 or more pounds of a high-GWP refrigerant, which includes CFCs and HCFCs, to register and report information about their equipment and refrigerants used. For ozone-depleting substances, N.J.A.C. 7:27E-2 is comparable to, but does not exceed, Federal requirements. For refrigerant alternatives to ozone-depleting substances, the Department has determined that there are no comparable Federal standards or requirements. Accordingly, a Federal standards analysis is not required.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

Full text of the adoption follows (additions to the proposal indicated in boldface with asterisks

thus; deletions from proposal indicated in brackets with asterisks ***[thus]***):

CHAPTER 27E

GREENHOUSE GAS MONITORING AND REPORTING

SUBCHAPTER 1. GENERAL PROVISIONS

7:27E-1.2 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

...

“Chiller” means a system of equipment used for chilling consisting of one or more compressors, condensers, and evaporators, with interconnections and accessories, including controls, designed for the purpose of cooling or heating water or a heat transfer fluid. A chiller is a machine specifically designed to make use of a vapor compression refrigeration cycle or absorption refrigeration cycle to transfer heat from a cold water or heat transfer fluid circulating system to the air, a heat transfer fluid, or other heat exchange media. Chillers can be water-cooled, air-cooled, or evaporatively cooled. Chillers include, but are not limited to, rotary chillers, centrifugal chillers, and positive displacement chillers, including reciprocating, scroll, and screw chillers. “Chiller” includes those used for comfort cooling, space and area cooling, or industrial process cooling.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

...

7:27E-1.3 Adjustment of fees

(a) The Department will increase the fees at N.J.A.C. 7:27E-2.2 and 3.3, in accordance with the schedule at Table 1 below.

1. (No change from proposal.)

2. The Recent CPI-U shall equal the most currently published Annual Average CPI-U before January 1 of the next five-year period at Table 1. The Base CPI-U shall equal the Annual Average CPI-U for the fifth year prior to the Recent CPI-U.

Table 1		
Five-Year Period	Base CPI-U	Recent CPI-U
[(operative date of the section)] June 21, 2022 ** through December 31, 2025	N/A	2019 Annual Average
January 1, 2026 through December 31, 2030	2019 Annual Average	2024 Annual Average
January 1, 2031 through December 31, 2035	2024 Annual Average	2029 Annual Average

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

* The first period begins on *[(the operative date of the section)]* **June 21, 2022**, and is less than five full calendar years.

2.-5. (No change from proposal.)

SUBCHAPTER 2. REGISTRATION AND REPORTING FOR REFRIGERATION SYSTEMS

7:27E-2.1 Registration requirements for a facility with one or more refrigeration systems

(a) The owner or operator of a facility with one or more refrigeration systems with a full charge greater than or equal to 50 pounds of high-GWP refrigerant shall electronically register the facility with the Department through the online business portal at NJDEPonline.com, in accordance with (b) below, by the following dates:

1. *[(The first day of the first month that is 90 days following the operative date of this section)]* **October 1, 2022**, where the facility had at least one refrigeration system installed on or before *[(the operative date of this section)]* **June 21, 2022**; or
2. Ninety days after installation of the first refrigeration system at a facility that had no refrigeration systems before *[(the operative date of this section)]* **June 21, 2022**.

(b)-(f) (No change from proposal.)

7:27E-2.3 Reporting requirements for a facility with one or more refrigeration systems

(a) The owner or operator of a facility subject to registration in accordance with this subchapter shall electronically submit through the Department's online business portal (NJDEPonline.com) an annual Facility Refrigeration System Report that contains the

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

information specified at (b) below. The report shall be submitted to the Department in accordance with the following schedule:

1. A facility with one or more refrigeration systems on or before *[(the operative date of this section)]* **June 21, 2022***, shall submit to the Department, on or before April 1, 2023, an initial report for the period from *[(the first day of the first month that is 90 days after the operative date of this section)]* **October 1, 2022*** through December 31, 2022. Subsequent reports shall be for a calendar year and shall be submitted by April 1 for the preceding calendar year.

2. All other facilities shall submit to the Department, on or before April 1 of the calendar year after installation of the first refrigeration system, an initial report for the period from the first day of the first month following installation or *[(90 days after the operative date)]* **September 19, 2022***, whichever is later, through December 31 of the year of installation. Subsequent reports shall be for a calendar year and shall be submitted by April 1 for the preceding calendar year.

(b) The Facility Refrigeration System Report shall include the following information for each refrigeration system at the facility:

1. - 9. (No change from proposal.)

10. Temperature classification (low temperature refrigeration system, medium temperature refrigeration system, or ***any* other *temperature classification***);

11.- 16. (No change from proposal.)

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

17. The total weight in pounds of ***each type of*** high-GWP refrigerant that was shipped by the facility during the reporting period to be reclaimed or destroyed.

SUBCHAPTER 3. REPORTING REQUIREMENTS FOR GAS PUBLIC UTILITIES

7:27E-3.1 Reporting requirements for gas public utilities

(a) A gas public utility operating within the State shall electronically submit through the Department's online business portal at NJDEPonline.com an annual Pipeline Modernization Report that contains the information specified at (b) below for mains and service lines in the State that are owned, leased, or controlled by the gas public utility. The Pipeline Modernization Report shall be submitted in accordance with the following schedule:

1. A gas public utility operating on or before ***[(the operative date of this section)]* *June 21, 2022***, shall submit to the Department, on or before ***[April 1]* *June 15***, 2023, an initial report for the period from ***[(the first day of the first month that is after the operative date of this section)]* *July 1, 2022*** through December 31, 2022. Subsequent reports shall be for a calendar year and shall be submitted by ***[April 1]* *June 15*** for the preceding calendar year.

2. A gas public utility that begins operation after ***[(the operative date of this section)]* *June 21, 2022***, shall submit to the Department, on or before ***[April 1]* *June 15*** of the calendar year after operation begins, an initial report for the period beginning the first of the month following operation through December 31. Subsequent reports shall be for a calendar year and shall be submitted by ***[April 1]* *June 15*** for the preceding calendar year.

(b) The Pipeline Modernization Report shall include:

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 6, 2022, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

1. (No change from proposal.)
2. Mains and service lines in New Jersey ***added,*** replaced*,* or refurbished in the reporting period, as follows:
 - i. Miles of mains grouped by the original mains material type and the replacement or refurbished material type; ***[and]***
 - ii. Number of service lines grouped by the original service line material type and the replacement or refurbished material type***[.]**;**
 - iii. Miles of mains added, grouped by material type; and**
 - iv. Number of service lines added, grouped by material type.***
3. Identification of ***each*** leak*[s]* from pipeline components that have a leak grade classification ranked as grade 1, 2, or 3, as follows:
 - i. - iv. (No change from proposal.)
 - v. Date that the leak is repaired; ***[and]***
 - vi. Location of the leak, including the street address or location description, municipality in which the component is located, county, zip code, latitude, and longitude***.**;***
 - *vii. If known, the method by which the leak was identified; and**
 - viii. If known, the volume of methane emissions released, per unit of time.***
4. - 5. (No change from proposal.)