Commonwealth of Pennsylvania

Department of Environmental Protection

Air Quality Program

Northwest Regional Office

Homer City Generation LP

1750 Power Plant Road, Homer City, PA 15748

Plan Approval 32-00457A

Comment Response Document

November 18, 2025

TABLE OF CONTENTS

GLOSSARY

AIHA - American Industrial Hygiene Association
APCA - Air Pollution Control Act
ASC - Ammonia Reduction Catalyst
BACT - Best Available Control Technology
BAT - Best Available Technology
BSER - Best System of Emission Reduction
CAMD - U.S. EPA's Clean Air Markets Division
CCS - Carbon Capture and Sequestration
CDC - Centers for Disease Control
CEMS - Continuous Emission Monitoring System
CH4 - Methane
CMP - Catalyst Management Plan
CMS - Continuous Monitoring System
CO - Carbon Monoxide
CO2e - Carbon Dioxide Equivalent
COPC - Chemicals of Potential Concern
DEP - Department of Environmental Protection
DLN -Dry Low-NOx
EJ Policy - Environmental Justice Policy
ELCR - Excess Lifetime Cancer Risk
EPA - U.S. Environmental Protection Agency
ERCS - Emission Reduction Credits
GE - Ge Vernova
GHG - Greenhouse Gas
H2SO4 - Sulfuric Acid Mist
HAPs - Hazardous Air Pollutants
HCHO - Formaldehyde
HI - Hazard Index
Homer City - Homer City Generation LP
IRA - Inhalation Risk Assessment
KJST - Cambria County Airport
LAER - Lowest Achievable Emission Rate
LCOE - Comparative Levelized Cost of Energy
LDAR - Leak Detection and Repair
NAAQS - National Ambient Air Quality Standard
NH3 - Ammonia
NID - Novel Integrated Desulfurization
NNSR - Nonattainment New Source Review
NOx - Nitrogen Oxides
NSPS - Federal New Source Performance Standards
OTR - Ozone Transport Region
PM - Particulate Matter
PS-11 - Performance Standard 11
PSD - Prevention of Significant Deterioration
PTE - Potential to Emit
RATAS - Relative Accuracy Test Audits
RBLC - RACT/BACT/LAER Database
RfC - Reference Concentrations
SCR - Selective Catalytic Reduction
SD - Shutdown
SF6 - Sulfur Hexafluoride
SIP - State Implementation Plan
SO2 -Sulfur Dioxide
SOx -Sulfur Oxides
SU - Startup
tpy - Tons Per Year
VOC - Volatile Organic Compound
WRF - Weather Research and Forecasting

I. Project Description

On April 4, 2025, the Department of Environmental Protection (DEP) received a plan approval Application, which was assigned No. 32-00457A (Plan Approval) from Homer City Generation LP (Homer City) for a project to modify the existing coal-fired electric generating station to a new natural gas-fired electric generating station. The project is located at 1750 Power Road, Homer City, PA 15748, in Center Township, Indiana County. The operation of the air contamination sources at the coal-fired generating station is authorized by the DEP under a Title V Operating Permit No. 32-00055. The coal-fired generating station has not been producing power since 2023 and is being demolished for construction of the project described in the Plan Approval Application.

Homer City proposes to install seven (7) GE Vernova (GE) 7HA.02 combined-cycle combustion turbines and ten (10) Mitsubishi Power FT8 Gas Turbine MOBILEPAC simple-cycle aeroderivative gas turbines, along with associated ancillary equipment. The new turbines will be fueled exclusively by natural gas and equipped with Selective Catalytic Reduction (SCR) to control nitrogen oxide (NOx) emissions and an oxidation catalyst to control carbon monoxide (CO) and volatile organic compound (VOC) emissions. The simple-cycle turbines will also utilize water injection for combustion control. Associated ancillary equipment includes: Three (3) 67 MMBTU/hr. natural gas-fired auxiliary boilers, Ten (10) 2.5 MW and two (2) 1.0 MW emergency generator engines, One (1) 399 BHP diesel-fired fire water pump engine, Seven (7) 10.8 MMBTU/hr. natural gas-fired fuel gas heaters, Seven (7) 8-cell cooling towers, Circuit breakers containing sulfur hexafluoride (SF6), and associated fugitive emission components from natural gas piping. For the purposes of this Comment and Response document, the installation and initial operation of the equipment described above will be referred to as the “Project.”

The DEP's review was conducted under the authority of the Pennsylvania Air Pollution Control Act and its regulations. This authority is specific to the control of air contaminant emissions to protect public health and welfare. The Project is a "major modification" to an existing major stationary source (the former coal-fired electric generating station) and is subject to both Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) requirements.

Prevention of Significant Deterioration (PSD) Homer City performed a PSD netting analysis in accordance with 40 CFR § 52.21, utilizing creditable emission decreases from the retirement of the former coal-fired boilers (based on a 2021-2022 baseline). After this netting step, the Project's net emissions increase is *below* the significant emission rates for Nitrogen Oxides and Carbon Monoxide, allowing the Project to "net out" of PSD review for those pollutants. The netting analysis for PSD is detailed in Table 3-10 of the Application.

For Nitrogen Oxides : Project Emissions Increase: **+1,142.80 tons per year (tpy),** Creditable Emission Decrease: **-2,031.8 tpy**, **Project Net Change: -889.0 tpy,** this is below the PSD and NNSR significance threshold of **40 tpy**, so PSD and NNSR review was not triggered for Nitrogen Oxides.

For Carbon Monoxide : Project Emissions Increase: **+1,104.80 tpy**, Creditable Emission Decrease: **-4,096.5 tpy,** Project Net Change: **-2,991.7 tpy,** this is below the PSD significance threshold of **100 tpy**, so PSD review was not triggered for Carbon Monoxide.

For Particulate Matter (PM), PM10, PM2.5, Sulfuric Acid Mist (H2SO4), and Greenhouse Gases (GHG) the Project's net emissions increase *exceeds* the PSD significant emission rates. Therefore, the Project requires a full Best Available Control Technology (BACT) analysis for these pollutants. BACT is a cornerstone requirement of the federal PSD permitting program. This analysis is required for any new major facility, or a major modification to an existing facility that is located in an area in "attainment" or "unclassifiable" for a National Ambient Air Quality Standard (NAAQS). BACT is an emissions limitation based on the maximum degree of reduction for each pollutant which the DEP, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques. To determine BACT, Homer City must perform a "top-down" analysis, which is a 5-step process outlined by the United States Environmental Protection Agency (EPA).

Nonattainment New Source Review (NNSR) The Project is located in Indiana County, which is part of the Ozone Transport Region (OTR). Under 25 Pa. Code Chapter 127, Subchapter E, sources in the OTR are subject to NNSR for the ozone precursors, Volatile Organic Compounds and Nitrogen Oxides. The Project's net emissions increase for Nitrogen Oxides is below the NNSR threshold. However, the net increase for Volatile Organic Compounds (VOCs) is 320.9 tons per year, which triggers NNSR applicability. The netting analysis for NNSR is detailed in Table 3-11 of the Application.

NNSR applicability for Volatile Organic Compounds (VOC) triggers two main requirements. First, the Homer City must apply the Lowest Achievable Emission Rate (LAER) for control technology. EPA regulations define LAER as “the most stringent emissions limitation which is achieved in practice by such class or category of stationary sources.” The LAER standard does not consider cost, energy, or other environmental factors. Second, Homer City is required to obtain 369.035 tons of VOC Emission Reduction Credits (ERCs) to offset the new emissions at a 1.15 to 1 ratio.

A key distinction, especially for the Project, is the difference between BACT and LAER: BACT allows you to consider economic, energy, and environmental impacts when evaluating the most stringent controls, LAER does not allow for consideration of cost or energy impacts. It is simply the most stringent limitation achieved in practice. For the Homer City Project, BACT was applied to the PSD pollutants (PM, H2SO4, GHG), while the more stringent LAER analysis was required for the NNSR pollutant (VOC).

As part of the review, DEP required Homer City to conduct a predictive computer modeling analysis of the potential impacts of Particulate Matter emissions from all equipment at the new plant. Air quality modeling was required only for particulate matter (PM, PM10, and PM2.5) because it was the only criteria pollutant subject to PSD review that had the

potential to impact the National Ambient Air Quality Standards (NAAQS). DEP reviewed this computer modeling analysis and determined Particulate Matter ambient air quality criteria will not be exceeded. There are no National Ambient Air Quality Standards (NAAQS) or PSD increments for H2SO4 or GHGs, so no air quality impact modeling is required for them. The NNSR rules do not require an air quality modeling analysis; instead, they require Homer City to apply the Lowest Achievable Emission Rate (LAER) and obtain emission offsets. So, no modeling was done for VOC.

DEP also required Homer City to conduct an Inhalation Risk Assessment (IRA) to evaluate the potential health risks from emissions of hazardous air pollutants (HAPs), including cancer-causing chemicals. DEP's environmental toxicologist and Bureau of Air Quality Modeling staff reviewed and commented on Homer City's plan to conduct the IRA. The same DEP staff reviewed the IRA final report. DEP concurred with the methodologies used and concluded that the plant's emissions do not pose an unacceptable risk to the public based on established DEP benchmarks.

DEP uses Excess Lifetime Cancer Risk (ELCR) to evaluate potential cancer risk. ELCR refers to the estimated number of cancer cases that would be expected due to lifetime exposure to a chemical or group of chemicals. This value is usually expressed as the excess number of cases out of the exposed population (i.e., 1 in 100,000 refers to 1 excess cancer case in a population of 100,000 exposed individuals). The DEP's benchmark for an acceptable risk level from a single facility is an ELCR of 10 in 1 million. The IRA's modeling predicted a maximum risk of **0.54 in 1 million** at the point of maximum impact (the "Maximum Exposed Individual") and a risk of **0.48 in 1 million** at the nearest sensitive population/residence. Both of these predicted impacts are well below the DEP's benchmark.

Furthermore, the Homer City's IRA evaluated chronic non-cancer risks using a Hazard Index (HI). The DEP's benchmark for this metric is an HI of 0.25. The facility's maximum modeled HI was 0.036, which is also significantly below the benchmark.

The public can read DEP's Review Memos on the Project, including a summary of the Particulate Matter computer modeling analysis and Inhalation Risk Assessment analysis on the DEP's Community Information Page for the Project: Homer City Generation Site Redevelopment | Department of Environmental Protection | Commonwealth of Pennsylvania

II. List of Commenters

List of Commenters					
Comment Number	**Commenter Name**	**Comment Number**	**Commenter Name**	**Comment Number**	**Commenter Name**
1	Nathan Eachust	27	Blake Ragghianti	53	Gisele Dudek
2	Jim Struzzi, State Representative, 62nd District	28	Danielle Downey Ragghianti	54	Antonio Casagrande
3	Katherine Wilde	29	Wade Baumgartner	55	Joanne Hall
4	Marcia Godich	30	Ken Gfroerer	56	Jon Robert Nuccetelli
5	John Schaefers	31	Mary Lou Kuhns	57	Dave Wilson
6	Dorothea Leicher	32	K.D. Ferrari	58	David Skellie
7	Erik McDarby	33	Timoth J. Telenko	59	Lori Shermer
8	Nancy Bergey	34	Peggy Hasley	60	Barbara Knickerbocker
9	Thomas Nelson	35	Jay Ting Walker	61	Jean Landis
10	Aggie Perilli	36	Susan Comfort	62	Michael Gumpert
11	Carrie Swank	37	Travis Hipp	63	Janice Lindsay
12	Allen Russ	38	Nicholas Hoffman	64	Colton Vidic
13	Poune Saberi	39	Ann Goldman	65	Bob Fusaro
14	Laura Blau	40	Ruth Thomas	66	Debra L. Limbach
15	Terri Balko	41	Liz Cook	67	Rodrigo Carrillo
16	Jane Kaminski	42	Amanda Poole	68	Lynda Sheklow
17	Jessica Jopp	43	Josh Shaffer	69	Autumn Harrison
18	Mx. Kat Marquez	44	Lindon Gamble	70	Chad Weaver
19	MJ Regan	45	Susan Flowers	71	Joseph Laquatra
20	Brian Penrose	46	Annette Marshall	72	Jeremy Struble
21	Lisa Marshall	47	Brenda Mitchell	73	Stacy L. Myers
22	Catherine Anderson	48	Debra Orben	74	Roger N. Pritts
23	Richard Cain / Jill O'Neill	49	Mary Lou Mills / Janet Roslund	75	Jennifer L. Pelton, Esq.
24	Arnold Foust	50	Paul Coleen	76	Taras Filenko / Elsa Limbach
25	Kurt Limbach	51	Matt Deal	77	Joanne Manganello
26	Shawn Steffee	52	Lawrence Levine	78	Charles McPhedran, Esq. – Clean Air Council, Penn Future, Sierra Club, Earthjustice

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Comment Number	**Commenter Name**	**Comment Number**	**Commenter Name**	**Comment Number**	**Commenter Name**
79	Shelley Meyers	109	Jeffrey Wentzel	139	Marlene Knight
80	AnnMarie Sardineer	110	Jane Rankin	140	Colin Freilich
81	Kristin Baker	111	Mary Barr	141	Susan Miller
82	Marya Bradley	112	Frank Schaller	142	Kathleen Miller
83	Jesse Shaw	113	Q Mark Dzmura	143	Todd Waymon
84	Laura Horowitz	114	Shari Johnson	144	Andrea and Eric Zinn
85	Jennifer Ivers	115	Joseph Kenosky	145	Shelley Schwartz
86	Brett Walter	116	Linta Bryant	146	Sandra Clark
87	Richard Miller	117	Joan Kolessar	147	Lily Bonga
88	Katrina Kelly	118	Timothy Murray	148	Anne Keys
89	David Schwartz, Esq. – Our Children's Trust	119	Paula Berry	149	Evan Dull
90	Lawrence Hafetz, Esp. – Clean Air Council	120	Thomas Baer	150	Robert Gibb
91	Unknown	121	Julie Kaye	151	Heather Goodman
92	Jill O'Neill	122	Judy Tiberi	152	Lisa Cook
93	Ismael Negrete	123	Karen Katrinak	153	Julie Nakhleh
94	Brooke Hamberger	124	Sharon Hoffman	154	David Ringle
95	Teri Dignazio	125	Francis Fedoroff	155	Lynda Kolesar
96	Saralyn Sarandis	126	Todd Garcia-Bish	156	George E. Martin
97	Peter Stanley	127	Barbara Parker	157	Dr. Elizabeth Dale Harris
98	Darlene Stanley	128	Kelly Riley	158	J. Allen Feryok
99	Vincent Gormish	129	Donald Imler	159	Tracey Ash
100	Ruth Ann Schmidt	130	Anita Rinehart	160	Tim Miller
101	Sharon Kessler	131	Jack Miller	161	Don Leon
102	Susan Faust	132	Jerry Rivers	162	Dana Siler
103	Regina Kozak	133	John Belch	163	Jessica White
104	William M. Johnson	134	Richard Aldred	164	Stacie Young
105	M S	135	Robert Havrilla	165	David Zanardelli
106	Judith Bohne	136	Judith Bohne	166	Mara Obelcz
107	Gene Parsons	137	Marsha Haack	167	Gail Harper
108	Nancy McCullough	138	Katie Chong	168	Robert Gaynor

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Comment Number	**Commenter Name**	**Comment Number**	**Commenter Name**	**Comment Number**	**Commenter Name**
169	John Dulik	202	Susan Murawski	235	Thomas Brenner
170	Linda Bescript	203	Jim Gergat	236	Robert Morgan
171	Neena Deibler	204	Dolores Fifer	237	Mary Ann Leitch
172	Carol Polena	205	George Erceg	238	Kevin Long
173	Hilary Naiberk	206	Susan Nabbitt	239	Mary Hogan
174	John Gricas	207	Dr. Michael Zuckerman	240	Victoria Cox
175	Brad Trutt	208	Dave Blair	241	Bob Steininger
176	Treva Rousseau	209	Theresa Ellis	242	Robert Depew
177	Dorene Miller	210	Matthew Nemeth	243	Dr. Judith McLean
178	Donna Gayer	211	Garth Dellinger	244	Richard Metz
179	Susan Porter	212	Jim Highland	245	Al Ferrucci
180	Stephanie Mory	213	Bonnie McGill	246	Robert Cooke Jr.
181	Susan Porter	214	Patricia Harris	247	Kelly Paal
182	Dr. Boris Dimbach	215	Dr. Nancy Levine	248	Barbara Atkinson
183	Silvana Borrelli	216	Cnthia Gathers	249	Wade Edris
184	Devera Lang	217	Heidi M. Hess	250	Ashley Funk
185	Hilary Flint	218	Frances Callahan	251	Mx William Gordon
186	Susan Babbitt	219	Patrick McDaniel	252	Victoria Cox
187	Alana Balogh	220	Brenda Uhler	253	Loyd Bastin
188	Dr. Deborah Gentile	221	Kathleen Johnson	254	Joia Mitchell
189	Russell Campbell	222	Garry Armstrong	255	Wendy Kedzierski
190	Karen Green	223	Victoria Beechler	256	Pauline Rosenberg
191	Pat Lupo	224	Amy Ershler	257	Julia Shapiro
192	Karen Norvig Berry	225	Dr. Walter Tsou	258	Melody Farrin
193	Mark Bartuska	226	Ardith Talbott	259	Deborah Polk
194	Stephen Moyer	227	Elizabeth Hedin	260	Doris Loud
195	Kay Ludwig	228	Dr. Marc and Alice Marc and Alice Imlay	261	Brian Brown
196	Vincent Prudente	229	Susan Holmes	262	Judy Scriptunas
197	Jenna Pinto	230	Anne Kearney	263	Dr. Sherwood Johnson
198	Judith McGovern	231	Dr. Michael Balsai	264	Aileen McEvoy
199	Ron Shepler	232	Ted Strand	265	Eric Brozell
200	Suzanne Lutz	233	Bruce Foster	266	Elizabeth Seltzer
201	Jennifer Kowaleski	234	Dorothea Leicher	267	Char Magaro

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268	Geraldine Wang	302	Diane DiFante	336	Daniel Weinberger
269	Mary Barchman	303	Dr. Stafanie Kroll	337	Tim Walsh
270	Peter G. Fitzpatrick	304	Matthew Holmes	338	David Lutzker
271	Jason Crawford	305	Kelly Pennypacker	339	Gilliam Graber
272	Dr. Jonathan Berger	306	William Gordon	340	Donald Lancaster
273	Ruth Kay Souder	307	Daniel Ardmore	341	Stacey Marchig
274	Gina Wawrzyniak	308	Sondra Choukroun	342	Keith Fisher
275	Michael Lombardi	309	Linda Burfield	343	Alfred Klosterman
276	Maryann Henninger	310	Melvin Sheets	344	Dr. Janet Swim
277	Don Hawkins	311	Karen Granche	345	Ann-Marie Christopher
278	Dr. Robert Little	312	Ted Uhlman	346	Gary Ryan
279	Denise Lytle	313	Joan Sattler	347	Vaughn Shirk
280	Dr. Alex Jackson	314	Juliann Wade	348	Anna Minore
281	Tai Chang	315	Alice McAfee	349	Sidne Baglini
282	Ettie Davis	316	Chris Pessolano	350	Bonnie Stoeckl
283	Bruce Bekker	317	Shannon Crooker	351	Daniel Volpatti
284	Mx Hermia Terra	318	Amy Ershler	352	Dan McCauley
285	Margaret O'Connell	319	Rachel Reese	353	Nancy Chernett
286	Monica Schallenberger	320	Ji Montgomery	354	Dr. JoDee LaCasse
287	Glenn Frantz	321	Frank Ayers	355	Laurie Plank
288	Claire Binkley	322	Brian Moore	356	Anna Tangi
289	Frank Sabatini	323	Frank Bartell	357	Jno Hunt
290	Dr. William Loftus	324	Joan Schooley	358	Jean Kammer
291	L. Drew	325	Karen Hollowell	359	Warren Hodgkiss
292	R. Austin	326	Dr. Roger Latham	360	Barbara Sonies
293	Carol Cherry	327	Tansy Foster	361	Pamela Moore
294	Jonathan Welch	328	Richard Hengst	362	Judy Knueven
295	Mark Gulden	329	Daniel Salmen	363	MacKenzie MacFarland
296	Marci Henzi	330	Michelle Hudson	364	Dr. Sanford Leuba
297	Kathryn Conrad	331	Mx. Paul Kalka	365	Robert Regan
298	Martha Black	332	Fred Kraybill	366	Priscilla Mattison
299	Judi Tiberi	333	Paul Montell	367	Doris Loud
300	Garvin Neill	334	A. Barnett	368	Emelia Previte
301	David Knox	335	Heidi M. Hess	369	Michael Siwy

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370	Elizabeth Good	405	Phoebe Wooding	440	Nancy Daniels
371	Joan Klein	406	Pete McCarthy	441	Don Walden
372	Sabrina Fedel	407	Carol Montague	442	Regina McTeague
373	Kathy Musser	408	Deb Burk	443	Tiffani Long
374	Anne Young	409	John Lapoint	444	Kelly Finan
375	Jacqueline McGinty	410	Carrie Swank	445	Gabriella Franco
376	G L	411	Susanne Groenendaal	446	Patrick Pagano
377	Doris Dick	412	Barbars Quinter	447	Jamie Masterson
378	Bill Ryding	413	Natalie Simon	448	Stephen Barry
379	Leann Turley	414	Mimi Clark	449	John McDermott
380	Larry Seymour	415	Victor Colon	450	Melissa Mancini
381	Betsy Delisle	416	Georgann Richard	451	Jamie Field
382	David Whiteman	417	Caroline Cotugno	452	Daniel Taroli
383	Juan Llarena	418	Shahin Shabanian	453	Dr. Robert Doll
384	Derek Gendvil	419	Matthew Gribble	454	Nancy Bergey
385	Susan Volz	420	Dr. Sydney Kahn	455	Charles Langschultz
386	Suzanne Hall	421	Melody Blair	456	Maria Durci
387	Daniel Eustice Jr.	422	Natalie Regan	457	Lee Bible
388	Faith Knipe	423	Martin Aguilar	458	Vaughn Miller
389	Sarah Wheeler	424	Lindsey Beacher	459	Emily J. Fine
390	Donna Bookheimer	425	Jessica Beneway	460	Steven Raulfs
391	Susan Hanna	426	Yolanda Winfield	461	Donna Reppert
392	Dennis Schaef	427	Lynne Waymon	462	Elaine Fultz
393	Sam Miller	428	James Morrison	463	Dr. Susan Tobia
394	Mina Kimak	429	Kate Kennedy	464	Dr. John Nagle
395	Andrea Withers	430	Donna Carswell	465	Liana Lang
396	Joyce Morrison	431	Alexa Manning	466	Ron Keeney
397	Robert Bergan	432	Jacquelyn Bonomo	467	Helen Tai
398	Richard Fox	433	Morgan Hayward	468	Louise Heidecker
399	Mandy Tshibangu	434	William Haegele	469	Christine Resch
400	Yvonne Paranick	435	Janet Bargh	470	Frances Morris
401	Ricki Hurwitz	436	Jaszmene Smith	471	John Cooper
402	Nancy Tate	437	K. Danowski	472	Christina Clement
403	Melvin Armolt	438	Rosemary delPino	473	Phyllis Terwilliger
404	Regina Brooks	439	Daniel Dayton	474	Paul Palla

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475	Mary Chudley	508	Robert Gumlock	541	Jesse Crouse
476	Kathleen Horwatt	509	Lorraine Brabham	542	Dr. Patricia Harlow
477	Ronald Hess	510	Tim Kelly	543	Annie Regan
478	Kelly Walker	511	Jean Wiant	544	Ray Roberts
479	John Bush	512	Elaine Cortese	545	Tamela Trussell
480	Steve Sears	513	Rachel Noll	546	Larisa Mednis
481	Robert Sroufe	514	Edna Scheifele	547	Etta Albright
482	Glendon Blume	515	Brenda Norris	548	Elizabeth Casman
483	Deborah Smith	516	Stephanie Myers	549	Kathryn Westman
484	Steve Olshevski	517	Brenda Grove	550	Andrea Bertram
485	Connie Yaqub	518	Elizabeth Karpinski	551	Andrew Puglionesi
486	Elizabeth Phillips	519	Rita Chapot	552	Jennifer Tobin
487	Cari Thompson	520	Jim Capps	553	Winifred Lutz
488	Kevin Cochrane	521	Michael Caterino	554	Constance Poissant
489	Tommy Bugno	522	Debra Schleiden	555	Carol Buskirk
490	Linda Myers	523	Patti Grabowski	556	Dr. Dana Driscoll
491	Linda Higgins	524	Abby Jones	557	Leigh Martinez
492	Janet Cavallo	525	David Bressler	558	Robert Sackett
493	Ron Richter	526	Eva Resnick-Day	559	Zaneta Plavi
494	Donna Smith	527	Linda Campbell	560	Robert Pacitti
495	Margaret Pullan	528	Barbara Gold	561	Jordan Tony
496	Linda Granato	529	Paul Brown	562	Briel Beaty
497	Kirk Frost	530	Cindy M. Dutka	563	Charles Leiden
498	Patricia Libbey	531	Van Plummer	564	Mary Ann Langhone
499	Thomas Snow	532	Tamar Dick	565	Donald R. Langhone
500	Rev. Paul Metzloff	533	Roberta Camp	566	Annie Regan on behalf of Jessica O'Neill
501	Beth Dreyer-DeGoede	534	Jen Ruckdeschel	567	Kurt Limbach
502	Arlene Wolk	535	Sarah Boucas Neto	568	Nate Rickets
503	Cecily Kihn	536	Dr. Phil Gordon	569	Wilde Schwierking
504	Dianne Klein	537	Karen Kirk	570	Eric Barker
505	William Scott	538	Martha Evans	571	Shawn Steffee
506	Scott Mato	539	Lisa Tull	572	Daniel Morris
507	Kathleen Gibson-Gallagher	540	Maureen Mueller	573	Jonathan Fantazier

III. Comments and Responses

A. General Support for the Project.

Comment: *Commenters generally support the Project, noting job opportunities and electricity availability, among other items.* Commenters 2, 19, 26, 29, 33, 43, 51, 54, 56, 57, 64, 65, 67, 70, 71, 72, 77, 83, 86, 87, 99, 571, and 572.

Response: The DEP acknowledges the commentors' support for the proposed Project. DEP's decision to issue, or deny, a plan approval for the construction and operation of an air contaminant source, such as that found in the proposed Project, is based on the consideration of all applicable state and federal air quality regulatory requirements, in coordination with DEP programs and consistent with Article I, Section 27 of the Pennsylvania Constitution.

B. General Concern.

Comment: *Commenter states because details of the future are unknown, the plan approval should be denied.* Commenter 22.

Response: DEP reviews the entire Project as whole but must do so in the context of the data that is before it. Presently, Homer City is only developing the natural gas-fired electric generating units and has not confirmed any other identified uses at this location. The air quality plan approval is just one piece of the DEP oversight. DEP has reviewed or is reviewing earth disturbance and other authorizations for construction of the power plant. DEP is also aware that this Project is the redevelopment of a previously used site and has unique challenges such as coal ash areas and existing infrastructure that must be avoided or addressed in the construction. Future redevelopment of the remainder of the site will be subject to additional permitting that will be scrutinized at the time.

C. Application Review Process.

Comment: *Commenters stated the Application was rushed through the DEP review process. They state the Application was submitted in April and DEP issued a draft approval in August after a short review process. They state this is insufficient to truly evaluate the technical emissions details, especially for such a massive facility and DEP should not "rubber stamp" or fast track projects that will harm Pennsylvania's environment.* Commenters 18, 21, 30, 31, 32, 34, 35, 40, 45, 46, 47, 48, 49, 50, 52, 53, 55, 58, 59, 60, 61, 62, 63, 79, 80, 81, 82, 84, 85, 88, 94, 95, 96, 100-543, 544, 545, 546, 547,548,549, 550, 551, 552, 553,554, 555, 556, 557, 566

Response: DEP's decision to issue, or deny, a plan approval for the construction and operation of an air contaminant source, such as that found in the proposed Project, is based on the consideration of all applicable state and federal air quality regulatory requirements, in coordination with DEP programs and consistent with Article I, Section 27 of the Pennsylvania Constitution. The DEP followed all statutory and regulatory requirements for the review and processing of this Plan Approval Application. The plan approval process is a rigorous technical evaluation to ensure that a proposed project can comply with all

applicable air quality standards. DEP does not "rubber stamp" applications. Due consideration was given to all aspects of the Application and the projected emissions from the facility. Through ambient air dispersion modeling, a comprehensive health risk analysis, and thorough evaluation of the technology to be used, DEP ensured that the Plan Approval will be protective of human health and the environment. DEP has reviewed plan approval Applications for other power plants using the same or similar technologies and was able to use its experience to address this Application within a reasonable time. DEP also coordinated internally to insure that other required authorizations were sought and appropriate input was received.

D. Public Participation

Comment: *Commenter asks why wasn't community input sought and why is there so little transparency?* Commenter 36.

Response: DEP has been and continues to be fully transparent with all aspects of the review of this Application and has provided the required public notice of the draft Plan Approval, along with enhanced community & stakeholder involvement as explained in the Response at Section D. 1., below.

Comment: *Commenter states there is a need for a public hearing with facts about the data center.* Commenter 74.

Response: While Homer City has publicly identified the potential for development of data centers and other uses in adjacent areas, no specific use of adjacent areas has been confirmed. Accordingly, DEP cannot speculate as to any sources of additional air contamination or the potential for environmental or human health impacts of future uses of the adjacent areas. However, as development progresses, DEP will be able to address impacts, if any, through its regulatory authority. DEP will provide the public information and provide notification through the *Pennsylvania Bulletin* so that the public may provide input if and when applications for permitting the development of adjacent uses are submitted.

E. Environmental Justice Policy

Comment: *Commenters state the draft plan approval process has not followed the DEP's Environmental Justice Participation Policy. The environmental justice policy is supposed to ensure that community questions are answered, and community voices are heard before the Project begins.* Commenters 18, 21, 34, 45, 46, 47, 48, 50, 52, 53, 58, 59, 60, 61, 62, 63, 78, 80, 81, 82, 84, 85, 88, 94, 95, 96, 100-543, 544, 545, 546, 547, 548, 549, 550, 551, 553,554, 555, 556, 557, 558, 21, 24 93, 561, 563, and 573.

Response: DEP's public participation process for this Plan Approval was planned and executed in accordance with the spirit and requirements of DEP's Environmental Justice Policy (EJ Policy). Per the EJ Policy "direct outreach to concerned residents may also be considered as notice for a project, whether through a phone call, letter, or email. Where appropriate, notices will also be published on DEP's website on the EJ Project Portal." The EJ policy also states that "[c]onsistent with its current practice, DEP will be available to the

local community throughout the permitting process. DEP will provide residents with information and assistance, as needed, and may recommend resources to facilitate understanding content within the permit application." The DEP's Environmental Justice Policy can be found here: Environmental Justice Policy

DEP's EJ Coordinator began identifying interested parties in April 2025. The EJ Coordinator directly notified interested residents, the League of Women Voters, Indiana Co. NAACP, and Blacklick Creek Watershed Association of the first community meeting held in July 2025 and the meeting and hearing held on September 17, 2025.

DEP also developed a Community Page on its website to share all Plan Approval documents and inform public, including a QR code to display at meetings that directed interested parties to the page. The complete Application, draft Plan Approval, and all DEP technical review memos (including the PSD Modeling Analysis and the Inhalation Risk Assessment Summary) were made publicly available on the DEP's website at the start of the comment period. DEP developed a plain language summary and disseminated it to interested parties. This provided all interested parties, including the commenters, with the essential technical documents needed to conduct a review and provide meaningful comment.

DEP set a public meeting on the Plan Approval to be held before the September 17 public hearing. That meeting and hearing was held at Indiana University of Pennsylvania which is within 5 miles of the planned Project. DEP shared the meeting and hearing information with the PA Department of Community & Economic Development, the Indiana County Commissioners, Indiana County Conservation District, Homer City Borough, White Township, Blacklick Township, Evergreen Conservancy, and Burrell Township parks and recreation.

The format of the September 17, 2025 meeting is a direct enhancement required by the EJ Policy to provide more public access than required by a standard permit review. DEP Air Quality regulations provide that the DEP may, in its discretion, hold a fact finding hearing but the regulations do not require a hearing. DEP routinely provides a hearing on larger or controversial projects and did so here. Consistent with DEP's EJ Policy, the DEP provided in addition to the formal public hearing, an informational question-and-answer "meeting" *before* the hearing on September 17, 2025. This informational meeting was held specifically to provide the public with direct access to DEP technical experts—including the permit reviewer, air quality modelers, and the environmental toxicologist—to ask questions *before* giving formal testimony. DEP staff were present and answered all technical questions.

The DEP provided multiple, flexible avenues for public comment, fulfilling the EJ Policy's goal of facilitating participation. In addition to the public meeting and public hearing, any person could submit detailed written comments via mail or email at any time during the 30-day comment period. DEP continued to accept comments even after the close of the comment period. The DEP has formally collected all concerns raised by the community, including those listed by the commenters on health risks, control technology reliability, and diesel generators. This comprehensive Comment and Response Document is the formal, legally required record that provides a specific, written response to *every* technical and procedural concern raised during the public participation process.

In accordance with the EJ Policy, DEP actively educated and engaged interested parties living in the area of the Project and provided enhanced opportunities for community involvement and public participation in the Plan Approval Application process.

F. Extension of Comment Period

Comment: *Commenters have requested extending the comment period for another 60 days and have said the community has not had time to find their experts to provide proper information or consider essential Department documents.* Commenters 24, 27, 28, 30, 31, 32, 44, 49, 55, 78, and 551.

Response: A notice of intent to issue the draft Plan Approval was published in the *Pennsylvania Bulletin* on August 16, 2025, which initiated a 30-day public comment period, as required by regulation. The notice was also published in the Indiana Gazette on August 23, 24, and 25, 2025, to ensure local awareness. Pertinent documents related to the draft Plan Approval were uploaded to DEP's website as they were generated, and the draft Plan Approval was uploaded to the website before it was posted in the *Pennsylvania Bulletin*. The comment period was open for a total of 45 days, closing on September 29, 2025, which exceeds the regulatory requirement.

All permitting documents, including the 500+ page Application, the draft Plan Approval, and the DEP's technical review memos—including the PSD Modeling Analysis Summary and the Inhalation Risk Assessment (IRA) Summary—were made available for public review on the DEP's publicly accessible "Homer City Generation Site Redevelopment" community webpage. The DEP also created and disseminated a "plain language summary" of the Project to make the technical details more accessible to the public. This provided all interested parties, including the commenters, with the essential technical documents and explanation needed to conduct a review and provide meaningful comment.

Finally, the DEP made its experts (including the permit reviewer, air quality modelers, and environmental toxicologist) available for questions at the public meeting on September 17, 2025. The informational question-and-answer session, which was held immediately *before* the formal hearing, was specifically designed to provide the community with direct access to these technical experts to ask questions and have their concerns addressed well before the end of the comment period.

Because this process ensured meaningful public participation and the public participated in providing 573 comments on the Plan Approval, the Department does not believe additional time for comment or meetings will identify new or additional issues for consideration.

G. Regulatory Review

Comment: *Commenter states DEP has a duty to review the Application and evaluate it meets the Air Pollution Control Act and the air quality regulations.* Commenter 566.

Response: DEP agrees with this comment and believes our evaluation of the Application was conducted considering statutory regulatory and constitutional requirements in mind.

Comment: *Commenter requested best pollution mitigation, including better scrubbers.* Commenter 23.

Response: The DEP's review process, which includes a Best Available Technology (BAT), Best Available Control Technology (BACT), and Lowest Achievable Emission Rate (LAER) analysis, is designed to ensure the "best pollution mitigation" is required. LAER is the highest standard that can be applied when evaluating what pollution controls should be applied, as cost is not considered in that analysis. The term "scrubber" is typically associated with Sulfur Dioxide control for coal plants and is generally not applicable to natural gas combustion. For this facility, the top-tier controls for the turbines include advanced Dry Low-NOx (DLN) combustors and water injection, combined with post-combustion controls consisting of Selective Catalytic Reduction (SCR) for NOx control and an oxidation catalyst for CO and VOC control. This suite of technologies represents the most stringent emission control level currently available for this type of facility.

Comment: *Commenter states there is better technology for controlling ammonia, VOCs and Carbon Monoxide.* Commenter 40.

Response: The DEP conducted a thorough Best Available Technology (BAT) and Lowest Achievable Emission Rate (LAER) analysis for this Project, as required by state and federal regulations. This review concluded that the permit requires the most stringent and effective control technologies for these pollutants. For Carbon Monoxide (CO) and Volatile Organic Compounds (VOC): The "better technology" the commenter is referring to is an oxidation catalyst, which is precisely what this Plan Approval requires for all 17 turbines. For VOCs, this technology represents LAER, the most stringent control available. The Plan Approval limits, 0.7 ppmvd without duct burners firing and 1.5 ppmvd with duct burners firing for the large turbines, are based on the lowest rates achieved in practice for this specific, large-scale turbine class. For Carbon Monoxide (CO), the 2.0 ppmvd limit for the large turbines is based on the lowest emission rate that can be continuously and reliably measured by the required Continuous Emission Monitoring Systems (CEMS), which is essential for ensuring enforceable compliance. For Ammonia (NH3): the technology to control ammonia "slip" is the proper design and operation of the Selective Catalytic Reduction (SCR) system itself, which is BAT for controlling Nitrogen Oxides (NOx). The Plan Approval's 5.0 ppmvd limit for ammonia was determined to be BAT *for this specific turbine model*. Homer City's BACT analysis showed that while lower limits exist, they are for smaller or different turbine models. Due to the specific design and higher inlet NOx concentrations of the GE 7HA.02 turbine, the 5.0 ppmvd limit represents the maximum achievable reduction. Furthermore, the Plan Approval requires continuous monitoring of ammonia slip to ensure this limit is met at all times.

Comment: *Homer City's LAER/BACT/BAT Analyses Are Incorrect and Incomplete, Resulting in Impermissibly High Emission Limits.* Commenter 78.

Response: The DEP conducted a thorough review of Homer City's BACT/LAER/BAT analyses provided in Section 5 of the Application and determined that the analyses were performed correctly. The resulting emission limits in the Plan Approval satisfy all applicable state and federal requirements.

Best Available Control Technology or "BACT" is defined as the maximum degree of reduction that is "achievable." Lowest Achievable Emission Rate or "LAER" is defined as the most stringent emission limitation "achieved in practice." Best Available Technology or "BAT" is defined as technology that is "available or may be made available."

The DEP's authority requires a case-by-case determination based on demonstrated and achievable technologies. "Achieved in practice" means that the control or emission limit has been demonstrated as reliable and effective on a full-scale unit for a specific class and category of source. An emission limit or control in a permit for a facility that was never constructed, such as the Renovo Energy Center cited by the commenter, has not been "achieved in practice" and does not demonstrate that the limit is "achievable" or "available" on a consistent, long-term basis for a different source. While such limits are reviewed as part of the analysis, they do not automatically represent the BACT or LAER "floor" for all subsequent projects.

The BACT/LAER/BAT analyses are, by definition, a "case-by-case" determination. This analysis must consider the specific source, manufacturer, and configuration proposed. Homer City's analysis correctly followed the 5-step top-down methodology, starting with a review of the RBLC database and then eliminating technically infeasible options to arrive at a final, achievable emission limit. For a new source, the "principal basis" for determining achievability is the manufacturer's data and guarantees for the specific equipment being installed. The emission limits in this Plan Approval are based on the manufacturer-provided data for the specific GE 7HA.02 and Mitsubishi FT8 turbines proposed for this Project. The GE 7HA.02 has larger duct burners than that proposed at the facility referenced by the commenter and the manufacturer could not guarantee lower limits.

The DEP has determined that Homer City's analyses are correct and that the limits in the Plan Approval represent the most stringent rates that have been demonstrated as achievable and continuously reliable for this specific class of equipment. The specific justifications for each pollutant limit challenged by the commenter are provided in the following sections.

1. Modification of Existing Facility.

Comment: *Commenters state the Application calls the natural gas-fired power plant a modification of the existing facility when in reality it is a brand-new facility with a different fuel. Commenter states it is not a modification of an existing plant.* Commenters 25, 73, 91, 92, 564, 565, and 567.

Response: Homer City maintains a Title V permit that authorized the operation of the coal-fired power plant as a major source at this location. Homer City proposed the construction of the natural gas-fired power plant in this Plan Approval to replace the coal-fired power plant that is being demolished and submitted this application as a modification of that facility.

Comment: *Commenters states the plant will emit more of some pollutants that the former coal plant. All pollution should be compared to the empty site there is today, rather than the unsupported statistics assumed from the pollution that was there three years ago.* Commenter 40 and 42.

Response: For its Application, Homer City performed air dispersion modeling to determine compliance with the National Ambient Air Quality Standards (NAAQS) and to support an inhalation risk assessment. The air dispersion modeling for the NAAQS accounted for total emissions that will be emitted from the facility. The air dispersion modeling for the inhalation risk assessment accounted for total emissions of chemicals of potential concern (COPC).

The DEP's review requires the use of two different "baselines" for two separate and distinct regulatory requirements. The commenter is correct that the Project's new emissions must be evaluated against the current, ambient air quality to protect public health, and this analysis was, in fact, performed.

PSD/NNSR Netting Analysis (The "Old Plant" Baseline): Federal and state regulations (40 CFR § 52.21 and 25 Pa. Code Chapter 127) require a "netting analysis" to determine *if* and *how* the stringent Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) programs apply. This is a specific, backward-looking test that compares the new Project's potential emissions to the "baseline actual emissions" from the former plant. For this Project, that baseline period was 2021-2022, when the coal plant was still operating. This analysis is what demonstrated the Project results in a significant net decrease of pollutants like NOx and CO.

Air Quality Impact Analysis (The "Current" Baseline): While the Project results in a net decrease of NOx and CO, the commenter is correct that there will be a net increase in other pollutants, including PM, PM2.5, VOCs, and H2SO4. These increases are what triggered the stringent PSD and NNSR reviews. This is the analysis that addresses the commenter's specific request and is used to protect public health. The DEP required Homer City to perform a detailed air dispersion model for all pollutants that triggered PSD review (PM10 and PM2.5). This model predicts the new plant's impacts and adds them to a "current baseline" that is established using the most recent (2022-

2024) data from DEP's ambient air quality monitors in the region, specifically the monitors in Johnstown and Strongstown. The purpose of *this* analysis is to demonstrate that the new plant's emissions, when added to the current background air quality, will not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS).

In summary, the DEP did use the current air quality baseline to ensure the Project is protective of public health, and the results of that analysis confirm that the Project's emissions will not violate any of the health-based NAAQS.

2. Netting of Emissions.

Comment: *Commenters stated that the old polluting Homer City plant was able to pollute the air very badly and now has been able to sell "pollution credits "which will allow a new polluter to massively pollute our communities air with toxins is in clear violation of Pennsylvania's citizens right to clean air and water under our state constitution.* Commenter 25, 73, 91, 92, 564, and 565.

Response: The comment refers to "pollution credits," which are part of a federally approved regulatory mechanism under the Clean Air Act's Prevention of Significant Deterioration (PSD) program called "netting." This mechanism allows a facility to use permanent and enforceable emission reductions from recently shut-down sources to offset emission increases from new sources at the same site. For this Project, Homer City used netting for nitrogen oxides (NOx) and carbon monoxide (CO). The emission reductions from the retirement of the former coal boilers were greater than the potential emissions of the new gas turbines for these specific pollutants. Therefore, the Project results in a significant *net decrease* in emissions of NOx and CO compared to the facility's historical baseline, leading to an overall improvement in local air quality for these pollutants. This is a long-standing, EPA-approved program designed to allow for industrial modernization while ensuring air quality is protected. For Volatile Organic Compounds (VOCs), Homer City is required to purchase and surrender 369 tons of Emission Reduction Credits (ERCs) from the open market to offset the facility's potential to emit of 332.16 tpy. This ratio of 1.15-to-1 emission offset satisfies the requirements of Nonattainment New Source Review (NNSR).

3. Modeling.

Comment: *Commenters ask what air and wind studies have been undertaken to understand how and where, and in what concentrations the vast amounts of pollutants that will be released by the proposed facility and state the DEP has not released an air study or map that shows how the pollution will move through our communities.* Commenters 30, 31, 32, 49, 55, 66, 79, 97, and 98.

Response: For its Application, Homer City performed air dispersion modeling to determine compliance with the National Ambient Air Quality Standards (NAAQS) and to support an inhalation risk assessment. The air dispersion modeling accounted for the stack height, stack diameter, stack exhaust temperature and velocity, and maximum hourly emission rate for each emission source and operating scenario.

The air dispersion modeling also accounted for building downwash, local terrain, and meteorology that represents local atmospheric conditions including wind speed and wind direction. The air dispersion modeling for the NAAQS was included in Section 7 and Section 8 of Homer City's Application. Depictions of the resulting concentrations in the vicinity of Homer City's proposed facility were included in Figure 7-1, Figure 7-2, Figure 7-3, Figure 8-1, and Figure 8-2. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that the emissions from the proposed facility would not cause or contribute to a violation of the NAAQS.

The inhalation risk assessment was included with Homer City's Application as a separate report. Depictions of the resulting risks in the vicinity of Homer City's proposed facility were included in Figure 6-1, Figure 6-2, and Figure 6-3. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the excess lifetime cancer risk (ELCR), chronic noncancer risk, and acute noncancer risk would not exceed DEP's benchmarks.[1] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period.

Comment: *The air quality modeling for pm in the Application is flawed because PM2.5 emissions inputs used in the model are incorrect, meteorological data used in the model are incorrect, and background concentrations used in the model are wrong.* Commenter 78.

Response: DEP disagrees with the commenters' general assertion that "the modeling conclusions that the PM-2.5 NAAQS and increments will not be exceeded are not robust and are likely to be wrong" as the emissions inputs are supported in Homer City's plan approval Application, representative meteorological data was utilized, and the monitored portion of the PM-2.5 background concentration conservatively included data from 2023, as detailed below. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that Homer City's air quality analyses satisfy the requirements of the Prevention of Significant Deterioration (PSD) regulations. In accordance with 40 CFR § 52.21(k), Homer City's source impact analyses demonstrate that the Project would not cause or contribute to air pollution in violation of the NAAQS or PSD increment for PM-2.5.

PM2.5 Emissions Inputs Used in the Model are correct. Homer City performed air dispersion modeling to determine compliance with the National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) increments for PM-2.5. The air dispersion modeling for the NAAQS accounted for total emissions that will be emitted from the facility, not just the significant net emissions increase. All emission sources were conservatively modeled at respective maximum hourly emission rates and were assumed to be in operation at the same time and on a continuous basis for the full 5-year meteorological period. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that the emissions from the

[1] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.

proposed facility would not cause or contribute to a violation of the NAAQS or PSD increments for PM-2.5.

The DEP has confirmed that the PM2.5 emission limits in the Plan Approval are consistent with the Application and are supported by the manufacturer. The PM2.5 emission rates used in the air dispersion modeling are the same as the enforceable BACT/BAT limits established in the Plan Approval. For example, the combined-cycle turbine limit of 0.0054 lb./MMBtu and the simple-cycle limit of 0.011 lb/MMBtu are based on manufacturer data from GE Vernova and Mitsubishi, respectively, as noted in the DEP's Technical Review Memo. Furthermore, the PM2.5 limits for the auxiliary boilers (0.0075 lb/MMBtu) and fuel gas heaters (0.0048 lb/MMBtu) are supported by vendor guarantees from CIB Unigas and Aether DBS. This confirms the modeling was based on the correct, achievable, and enforceable emission rates.

Meteorological Data Used in the Model are correct. DEP disagrees with the commenters that a prognostic meteorological model, i.e., Weather Research and Forecasting (WRF) model, should have been used for this proposed facility and that prognostic meteorological data, "is the next-best option when onsite meteorological data was not collected." EPA's *Guideline on Air Quality Models*[2] states, "[f]or some modeling Applications, there may not be a representative NWS or comparable meteorological station available (e.g., complex terrain), and it may be cost prohibitive or infeasible to collect adequately representative site-specific data. For these cases, it may be appropriate to use prognostic meteorological data…" For Homer City's modeling Application, there is a representative NWS meteorological station available, i.e., Johnstown – Cambria County Airport (KJST). Additionally, EPA has stated that representative NWS data are preferred over prognostic data.[3]

The fully processed KJST meteorological dataset satisfies EPA's recommendations for use in AERMOD,[4] and was appropriate for AERMOD to construct realistic boundary layer profiles to adequately represent plume transport and dispersion under both convective and stable conditions within the modeling domain. Homer City provided a robust description of why a 5-year meteorological dataset derived from surface data measured at KJST was representative of atmospheric conditions near the proposed facility in subsection 4.6 of the Prevention of Significant Deterioration (PSD) modeling protocol,[5] which was approved by DEP on March 17, 2025.[6] This protocol was included as Appendix I of the plan approval Application.

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[2] *Code of Federal Regulations*. 40 CFR Part 51, Appendix W (Guideline on Air Quality Models). Subsection 8.4.5.1(a).

[3] https://gaftp.epa.gov/Air/aqmg/SCRAM/webinars/MMIF/MMIF-WebinarPresentation.pdf. See slide 5.

[4] *Code of Federal Regulations*. 40 CFR Part 51, Appendix W (Guideline on Air Quality Models). Subsections 8.4.3.2 and A.1(b)(2).

[5] Air Dispersion Modeling Protocol. March 4, 2025. Prepared for: Homer City Generation, L.P. Prepared by: AECOM, Chelmsford, MA.

[6] E-mail with attachment (DEP Acceptance of Air Dispersion Modeling Protocol) from Daniel J. Roble, DEP/BAQ/Permits/Air Quality Modeling and Risk Assessment to Jeffrey Connors, AECOM. March 17, 2025.

KJST meteorological data has historically been used in air dispersion modeling to support other projects at Homer City's site. The air dispersion modeling to support the issuance on Plan Approval 32-00055H in 2013 and Plan Approval 32-00055I in 2015 utilized a KJST meteorological dataset to establish sulfur dioxide (SO_2) emission limits associated with the Novel Integrated Desulfurization (NID) systems on Unit 1 and Unit 2 of the former coal-fired plant. Additionally, DEP submitted a State Implementation Plan (SIP) revision[7] to EPA in 2023 for the 2010 1-hour SO_2 National Ambient Air Quality Standard (NAAQS) that included an attainment demonstration that utilized a KJST meteorological dataset in the air dispersion modeling for the former Homer City coal-fired plant. EPA approved this SIP revision in 2024.[8]

The commenters then state that the Application fails to consider the plumes from the FT8 units. Although the FT8 unit stacks are approximately 30 meters lower than the combined-cycle unit stacks, the FT8 units have an estimated plume height of approximately 730 meters, which is similar to the estimated plume height of 765 meters (see subsection 4.6.3 of Appendix I) for the combined-cycle units. Therefore, the plume height analysis for the combined-cycle units to justify use of KJST is applicable to the FT8 units as well.

Background Concentrations Used in the Model are correct. The commenters' assertion is incorrect that the monitored portion of the PM-2.5 background concentration in the Prevention of Significant Deterioration (PSD) air dispersion modeling did not include PM-2.5 due to Canadian wildfires in 2023. To represent the monitored portion of the PM-2.5 background concentrations, Homer City utilized 3-year (2022-2024) certified 24-hour and annual PM-2.5 design values based on measurements from DEP's Strongstown monitor without any adjustments to exclude data due to events such as wildfires.

EPA's *Guidance for Ozone and Fine Particulate Matter Permit Modeling* (EPA-454/R-22-005, July 2022), subsection IV.3 (Comparison to the NAAQS), recommends that the monitored design value be combined with the modeled design concentration for primary PM-2.5 impacts based on AERMOD estimates of the proposed source's and other nearby source's direct PM-2.5 emissions and the secondary PM-2.5 impact as a "First Level" analysis for PM-2.5 National Ambient Air Quality Standards (NAAQS) compliance demonstrations. This document also outlines guidance for a "Second Level" 24-hour PM-2.5 modeling analysis where the background monitored component may be adjusted to account for seasonal variations in monitored background PM-2.5 levels. Homer City followed this guidance and used a "First Level" analysis.

[7] FINAL State Implementation Plan Revision: Attainment Demonstration (Dispersion Modeling), RACT/RACM, RFP and Contingency Measures. Indiana, PA Nonattainment Area for the 2010 1-Hour Sulfur Dioxide National Ambient Air Quality Standard. October 2023. https://greenport.pa.gov/elibrary/GetFolder?FolderID=811711.
[8] Air Plan Approval; Pennsylvania; Attainment Plan for the Indiana Nonattainment Area for the 1-Hour Sulfur Dioxide National Ambient Air Quality Standard. October 15, 2024. https://www.federalregister.gov/documents/2024/09/13/2024-20598/air-plan-approval-pennsylvania-attainment-plan-for-the-indiana-nonattainment-area-for-the-2010.

Additionally, modifications could be made to the ambient data record to include removal of data from specific days or hours when the monitor was impacted by widespread wildfire smoke in accordance with subsection 8.3.2(c)(ii) of EPA's *Guideline on Air Quality Models* (40 CFR Part 51, Appendix W) and EPA's April 4, 2019, memorandum, *Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events*. Homer City did not explore any option to modify the PM-2.5 data.

4. Stack Height and Downwash.

Comment: *Commenters state the facility is proposed to have 7 stacks that are only 190 feet at the point of release, causing significant concentrations of pollutants to be released close to ground level. Commenters request what are the anticipated geographical distribution and concentration of estimated contaminants? Commenters also requested higher stacks.* Commenters 23, 30, 32, 42, 49, 55, 66, 97, and 98.

Response: The commenters are correct that the seven (7) combined-cycle combustion turbine stacks are proposed to have a height of 190 feet at the point of release. The air dispersion modeling accounted for the stack height, stack diameter, stack exhaust temperature and velocity, and maximum hourly emission rate for each emission source and operating scenario, including those of the seven (7) combined-cycle combustion turbines.

For its Application, Homer City performed air dispersion modeling to determine compliance with the National Ambient Air Quality Standards (NAAQS) and to support an inhalation risk assessment. This analysis conservatively predicts the concentration of pollutants at all locations in the surrounding area. The air dispersion modeling for the NAAQS was included in Section 7 and Section 8 of Homer City's Application. Depictions of the geographical distribution and concentration of estimated contaminants in the vicinity of Homer City's proposed facility were included in Figure 7-1, Figure 7-2, Figure 7-3, Figure 8-1, and Figure 8-2. A summary of the modeled results were included in Table 7-2, Table 7-3, Table 8-1, and Table 8-2. The inhalation risk assessment, on 53 chemicals of potential concern (COPC) that would be emitted from the facility, was included with Homer City's Application as a separate report. Depictions of the resulting risks in the vicinity of Homer City's proposed facility were included in Figure 6-1, Figure 6-2, and Figure 6-3.

The stack heights from Homer City's proposed facility are different from the decommissioned coal plant. The air dispersion modeling accounted for the stack height, stack diameter, stack exhaust temperature and velocity, and maximum hourly emission rate for each emission source and operating scenario. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that the emissions from the proposed facility would not cause or contribute to a violation of the NAAQS. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the excess lifetime cancer risk (ELCR), chronic noncancer risk, and acute noncancer risk

would not exceed DEP's benchmarks.[9] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period.

Comment: *Commenter states due to shorter stacks and lower-temperature flue gas, the emissions from the natural gas plant may be more susceptible to downwash and less dispersion, disproportionately impacting the communities located near the plant, along with those communities situated between the Chestnut and Laurel Ridges.* Commenters 20, 66, 97, and 98.

Response: Under the Clean Air Act, DEP is required to ensure that emissions from any new facility would not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). These standards are set by EPA at levels necessary to protect public health with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals with respiratory conditions. This applies for all members of the public, including those located in the communities situated between the Chestnut and Laurel Ridges. The standards are also designed to protect public welfare from any known or anticipated adverse effects, which includes protecting crops and vegetation.

For its Application, Homer City performed air dispersion modeling to determine compliance with the NAAQS and to support an inhalation risk assessment. The air dispersion modeling accounted for building downwash, local terrain, and meteorology that represents local atmospheric conditions. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that the emissions from the proposed facility would not cause or contribute to a violation of the NAAQS and that the excess lifetime cancer risk (ELCR), chronic noncancer risk, and acute noncancer risk would not exceed DEP's benchmarks.[10]

5. Emission Monitoring.

Comment: *Commenters stated stack testing only once every 5 years is too infrequent to appropriately measure Hazardous Air Pollutants (HAPs) which may pose a large health risk and PM, and that DEP should require stack testing to be performed more frequently.* Commenters 3 through 15; 35, 37, 40, 41, 78, 93, 559-563, 573, and 569.

Response: The DEP agrees that the stack testing frequency should be increased. DEP reviewed other natural gas turbine power plant emission data, such as CPV Fairview, LLC TVOP 11-00536, Jackson Township, Cambria County, that use the same type of General Electric combined cycle turbines proposed by Homer City and have the same type of add-on controls. The final Plan Approval will be revised to require

[9] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.
[10] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.

recurring stack testing for all turbines every two (2) years, instead of five for the following pollutants:

- Particulate Matter (PM)
- Volatile Organic Compounds (VOCs)
- Formaldehyde (HCHO)
- Ammonia (NH3)

Furthermore, the facility is required to operate Continuous Emission Monitoring Systems ("CEMS") for NOx and CO, which provides continuous assurance that the combustion process and oxidation catalyst (which controls organic HAPs) are operating properly. These CEMS must undergo Relative Accuracy Test Audits (RATAs) to ensure their accuracy, further strengthening compliance assurance between stack tests.

Comment: *Commenters stated DEP should require Continuous Emissions Monitoring Systems (CEMS) for Volatile Organic Compounds (VOCs) to be installed to ensure compliance with emissions limits at all times.* Commenters 3 through 15; 35, 40, 93, 559-563, and 573.

Response: The DEP is not requiring a VOC CEMS because it is not considered technically feasible for this type of source. Commercially available CEMS for VOCs typically measure total hydrocarbons, not the entire spectrum of compounds that constitute VOCs, as defined by regulation. A monitor capable of continuously measuring all relevant species of VOCs from a combustion turbine exhaust stream is not a commercially available, demonstrated technology. Compliance with the VOC LAER limit will be ensured through the proper operation of the oxidation catalyst and stack testing every two years using EPA Reference Methods 18 and 25A.

Comment: *Commenters stated DEP should require CEMS for filterable Particulate Matter (PM) to be installed to ensure compliance with emissions limits at all times. They state this is especially important for Particulate Matter (PM) given how close the region is to the attainment threshold under the National Ambient Air Quality Standards (NAAQS). They further state that any violations could, hypothetically, lead to violations of the standard.* Commenters 3 through 15; 35, 37, 40, 93, 559-563, and 573.

Response: Filterable PM emissions from the exclusive combustion of pipeline-quality natural gas are inherently low due to gaseous fuel and low sulfur content of the fuel. PM CEMS are appropriate for sources with high filterable PM and variable PM emissions, such as coal-fired boilers or cement kilns.

For a PM CEMS system to work accurately, it must follow Performance Standard 11 (PS-11), which is an EPA standard that applies to PM CEMS. The accuracy of a PM CEMS is verified through a process known as correlation testing, which is comparing the output of a PM CEMS against Method 5 measurements for filterable PM. Gas turbine emissions are aerosol-like and do not contain much filterable PM. Hence, the PM CEMS for a gas turbine would not yield accurate results. In addition, the PS-11 requires 3 different solid particulate levels to calculate a calibration curve. It is not

possible to generate three different levels of solid particulate levels on natural gas fired combustion turbines; this means a PM CEMS could not be properly calibrated, making the outputs unreliable. With these shortcomings, DEP does not believe a PM CEMS is a technically feasible option for Homer City. For natural gas turbines, PM limit compliance can be reliably assured through the initial and periodic stack tests required by the Plan Approval. To this end, DEP is increasing the frequency of PM stack testing compared to the draft permit.

Comment: *Commenters stated DEP should require CEMS for Ammonia to be installed to ensure compliance with emissions limits at all times. They state this is important because the Ammonia emissions permitted can be smelled downwind and ammonia also leads to formation of PM which could lead to violations of the PM standard.* Commenters 3 through 15; 37, 41, 93, 559-563, and 573

Response: The Plan Approval requires continuous monitoring of ammonia emissions. This is accomplished using an indirect, or "surrogate," CEMS. This system uses the certified NOx CEMS data from after the SCR control device, data from the CEMS on the pre-control NOx, and the measured ammonia injection rate, to continuously calculate the ammonia slip. This is a well-established and reliable method for continuously determining compliance with the ammonia slip limit and is standard practice for this source category.

Comment: *Commenters requested proper continuous monitoring to make sure those living in the area have the information they need to maximize their health.* Commenter 23, 42, and 569

Response: The DEP has required a comprehensive monitoring program for this facility. This includes continuous monitoring where it is technically feasible, and a robust program of periodic stack testing and parametric monitoring for other pollutants to ensure compliance. This includes Continuous Emission Monitoring Systems (CEMS) for NOx, CO, and O2; parametric monitoring of the oxygen catalysts and SCR control devices to ensure they are operating effectively; an indirect CEMS to calculate ammonia emissions; fuel monitoring; and periodic stack testing. These requirements provide the necessary information to ensure the facility is operating in a manner that is protective of public health.

For pollutants where CEMS are not technically feasible, the DEP is requiring a combination of periodic testing and continuous parametric monitoring. The Plan Approval requires initial stack testing upon startup, and then recurring stack tests every two (2) years for Particulate Matter (PM), Volatile Organic Compounds (VOCs), Ammonia (NH3), and Formaldehyde (HCHO).

Parametric monitoring is an indirect method DEP uses to ensure that an air pollution control device is working properly. We require the facility to continuously monitor key operating parameters of the control device, such as temperature, pressure drop, and ammonia injection rate. During the initial stack test, the facility must prove that the control device is meeting its emission limits. At that same time, they must record the

"safe" operating ranges for those parameters. The permit then locks in those ranges. As long as the facility operates the control device within those established ranges, the DEP has a reasonable assurance that the equipment is operating as designed and effectively controlling pollution. Homer City is also required to monitor the amount of fuel burned and the sulfur content of the fuel.

Comment: *Commenter states that the emission censors are to be monitored on a regular basis, and have physical protections so they're not relying upon the censors being operated and maintained by the power plant itself.* Commenter 570.

Response: Under the Plan Approval and applicable federal regulations, the permittee (Homer City Generation) is legally responsible for installing, operating, and maintaining the Continuous Emission Monitoring Systems (CEMS). The DEP ensures the accuracy and integrity of the data ("censors") through a robust, federally enforceable system of certification, auditing, and reporting. The CEMS must be certified in accordance with strict U.S. EPA performance specifications (specifically 40 CFR Part 60 and 40 CFR Part 75). This is not an optional "self-check." The CEMS are required to perform automatic, daily self-checks (known as zero and span calibrations) to ensure the monitor is not "drifting" and remains accurate. The Plan Approval requires the facility to hire an independent, DEP-approved, third-party stack testing company to conduct annual Relative Accuracy Test Audits (RATAs). During a RATA, the third-party tester compares the CEMS data against a "reference method" (an actual physical stack test). If the CEMS data does not meet the strict accuracy requirements, the monitor is decertified, and the facility is in violation.

Finally, the facility must submit all emissions data, calibration data, and RATA results from its CEMS directly to the DEP, typically on a quarterly basis. DEP technical staff review this data for compliance, anomalies, and excess emissions. This multi-layered system of certification, independent auditing, and DEP data review ensures that the monitoring data is reliable, accurate, and continuously enforceable.

Comment: *Commenter encourages transparency in the DEP reporting and an annual, if not more frequent report comparable analysis between the Homer City power plant and others of similar nature around the Commonwealth.* Commenter 570.

Response: The Plan Approval mandates that the facility install, certify, and operate Continuous Emission Monitoring Systems (CEMS) for NOx, CO, and O_2 on all 17 turbines. All data from these CEMS, including any recorded exceedances, must be submitted to the DEP in quarterly compliance reports. Furthermore, the NOx CEMS data is subject to 40 CFR Part 75 and will be submitted to the U.S. EPA's Clean Air Markets Division (CAMD) database, which is accessible to the public. All submitted compliance reports and required stack test results are public records available for review. The DEP already collects the data necessary for the "comparable analysis" the commenter is requesting. Under 25 Pa. Code Chapter 135, the facility is required to submit a comprehensive Annual Emission Inventory. This report details the facility's total emissions of all criteria pollutants and hazardous air pollutants for the entire year.

This Annual Emission Inventory data from Homer City, along with the data from all "others of similar nature around the Commonwealth," is collected, compiled by the DEP, and made available to the public annually through the DEP's website. This public database allows the DEP, the EPA, and any member of the public to perform the exact comparable analysis the commenter is requesting.

Comment: *The Department Should Require the Applicant to Perform Stack Tests Over a Range of Operating Conditions, Not Only at Maximum Capacity.* Commenter 78.

Response: The DEP agrees with the commenter's technical premise that emissions of some pollutants, particularly Carbon Monoxide (CO) and Volatile Organic Compounds (VOCs), are often *lowest* at maximum load and *highest* at lower loads when the oxidation catalyst has not reached its optimal operating temperature.

The DEP's compliance strategy is designed to ensure compliance across *all* operating ranges, not just a single test at maximum load. The requirement to test at "maximum routine operating conditions" is primarily to establish the source's maximum emission potential and to perform the Relative Accuracy Test Audits (RATAs) required to certify the continuous monitors.

Compliance during all other operating modes is assured through different, continuous methods. For Normal Operation (All Loads), the commenter's concern about low-load CO and VOC emissions is addressed by the permit's continuous monitoring requirements. The facility is required to install, certify, and operate a Continuous Emission Monitoring System (CEMS) for CO on all 17 turbines. This CEMS runs continuously and must demonstrate compliance with the 1-hour ppmvd limit during *all* periods of normal operation, including low-load, partial-load, and full-load conditions. If the facility operates at a low load and the catalyst is cold, the CEMS will record a high CO value, which would be an enforceable violation.

For VOCs, the facility is required to install, certify, and operate a continuous parametric monitoring system for the oxidation catalyst (which controls VOCs). This system continuously monitors the catalyst's inlet temperature to ensure it remains within the manufacturer's specified range (which is established during the initial stack test). Operating at a low load *below* this required temperature would be a violation of the permit's operating conditions. This ensures the catalyst is hot and working effectively.

The DEP is aware that the control catalysts are not effective during startup and shut down low-temperature events. For this specific reason, the Plan Approval establishes **separate, mass-based (lb/event) emission limits** for NOx, CO, and VOCs that apply *only* to these startup/shutdown events. The data from the CEMS (for CO/NOx) and specified emission factors (for VOC) will be used to calculate the total mass (in pounds) emitted during each specific startup/shutdown event to demonstrate compliance with these separate limits.

The CEMS and the continuous parametric monitors are the primary tools that provide 24/7/365 compliance assurance across all operating ranges.

Comment: *To Ensure Compliance with Hourly and Rolling Annual VOC and PM Emission Limits, the Department Must Require VOC CEMS.* Commenter 78.

Response: CEMS (Continuous Emission Monitoring Systems) for Volatile Organic Compounds (VOCs) and filterable Particulate Matter (PM) are not required for this facility to ensure compliance. The DEP has determined that the combination of continuous parametric monitoring and periodic stack testing is sufficient to ensure the limits are enforceable and protective.

The commenter's request for a VOC CEMS is not technically feasible for this source type. CEMS that can continuously measure all species of VOCs (as required for the LAER limit) from a turbine exhaust stream are not a commercially available or demonstrated technology. The available monitors for "total hydrocarbons" do not equate to the permit's VOC limit. Therefore, compliance is ensured by two (2) other methods: 1) a stack test for VOCs every two (2) years, and 2) continuously monitoring the inlet temperature of the oxidation catalyst. This temperature is the key parameter that ensures the catalyst is operating correctly and destroying VOCs. Operating outside of the approved temperature range is a permit violation. This provides 24/7/365 assurance that the control device is functional.

The commenter's concern over "turbine ablation" and catalyst erosion is noted; however, PM CEMS are typically required for sources with high and variable filterable PM emissions. Filterable PM emissions from the exclusive combustion of pipeline-quality natural gas are inherently low and stable. Therefore, compliance is reliably assured through an initial stack test and recurring periodic stack testing every two (2) years. This frequency is sufficient to monitor for any long-term physical degradation of the turbines or catalysts that the commenter is concerned about.

Comment: *The Department Should Require CEMS for Ammonia Slip.* Commenter 78.

Response: The DEP agrees with the commenter that continuous monitoring of ammonia slip is a critical component of ensuring the Selective Catalytic Reduction (SCR) control system is functioning properly. For this reason, the DEP has required a continuous monitoring system for ammonia in the Plan Approval. However, the commenter's assertion that the permit *only* requires an indirect equation is a misinterpretation of the permit's requirements. The Plan Approval explicitly mandates that the permittee "install, certify, and operate a continuous monitoring system (CMS) to monitor ammonia (NH3) slip" for all 17 turbines. The permit allows this CMS to be a "surrogate" system, also known as a Predictive Emission Monitoring System or PEMS. This system uses continuous data from other required monitors such as the NOx CEMS at the inlet and outlet of the SCR, and the ammonia flow meter to continuously calculate the ammonia slip rate based on a site-specific formula. This is a highly reliable and DEP-approved method for continuous compliance assurance. This "surrogate" calculation is

not based on unverified estimates; it is based on real-time, measured data from other CEMS.

To ensure this continuous surrogate system is accurate, the Plan Approval requires two layers of "ground-truthing": 1) An initial stack test for ammonia must be performed to develop and validate the site-specific equation for the surrogate monitor; and 2) Periodic stack testing for ammonia must be performed every two (2) years to re-verify the accuracy and correlation of the continuous surrogate monitor.

This requirement for a continuous, stack-test-verified surrogate monitoring system is consistent with other large power plants in Pennsylvania and provides sufficient, enforceable assurance of continuous compliance with the 5.0 ppmvd BAT limit.

Comment: *DEP must add work practice requirements necessary to maintain the functionality of the SCR catalyst.* Commenter 78.

Response: The DEP agrees with the commenter's technical premise that the long-term functionality of the Selective Catalytic Reduction ("SCR") catalyst is critical. The commenter correctly notes that catalyst activity degrades over time, which can lead to an increase in ammonia slip. The Plan Approval utilizes a robust and effective method to ensure the catalyst's functionality: direct, continuous performance monitoring. As described below, this method is more effective than the annual inspections suggested by the commenter.

The Plan Approval requires Homer City to install, certify, and operate Continuous Emission Monitoring Systems (CEMS) for NOx and a continuous surrogate system for Ammonia (NH3) on all 17 turbines. These systems provide a real-time, 24/7/365 measurement of the SCR's actual performance. They will detect catalyst degradation (i.e., rising NOx or ammonia slip) far more effectively than a single annual inspection. As the commenter's own citation notes, "ammonia slip... increases as the catalyst activity decreases". The continuous ammonia monitor is specifically designed to catch this degradation in real-time, allowing the DEP and the operator to ensure the catalyst is replaced *before* it fails to meet the permitted emission limits. Any measured exceedance of the NOx or NH3 limit is an immediate, enforceable violation.

The commenter's request for a Catalyst Management Plan (CMP) and regular maintenance is already included as an enforceable component of the Plan Approval. The permit contains a general condition requiring the permittee to operate and maintain all sources and control devices "in a manner consistent with good air pollution control practices and in accordance with the manufacturer's recommendations as well as manufacturer's maintenance plan." This existing condition legally obligates the facility to follow the manufacturer's required CMP, which includes all schedules for inspections, tuning, and catalyst replacement. Adding a separate, duplicative condition is not necessary.

The DEP has determined that the combination of direct, continuous CEMS data and the enforceable general duty to follow the manufacturer's maintenance plan

provides a more comprehensive and superior method of ensuring SCR functionality than the prescriptive work practice standards suggested.

6. Health Risk Analysis/Inhalation Analysis.

Comment: *Commenters stated DEP should require the facility to perform a Health Risk Analysis for class 1 carcinogen Formaldehyde, and Toluene, Xylenes, Propylene Oxide, Ethylbenzene, and Acetaldehyde.* Commenters 3 through 15.

Response: For its Application, Homer City performed an inhalation risk assessment on 53 chemicals of potential concern (COPC), which included hazardous air pollutants (HAPs) such as formaldehyde toluene, xylenes, propylene oxide, ethylbenzene, and acetaldehyde, that would be emitted from the facility. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the excess lifetime cancer risk (ELCR), chronic noncancer risk, and acute noncancer risk would not exceed DEP's benchmarks.[11] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period.

Comment: *Commenters stated the Project would pose great risks to the health of residents, children, workers, animals and the agricultural community.* Commenter 16, 31-all 25, 40, 73, 91, 92, 564, 565, 569, and 567.

Response: Under the Clean Air Act, the DEP is required to ensure that emissions from any new facility would not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). These standards are set by the EPA at levels necessary to protect public health with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals with respiratory conditions. The standards are also designed to protect public welfare from any known or anticipated adverse effects, which includes protecting crops and vegetation.

For its Application, Homer City was required to perform air dispersion modeling. This analysis conservatively predicts the concentration of pollutants at all locations in the surrounding area. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that the emissions from the proposed facility would not cause or contribute to a violation of the NAAQS.

Furthermore, this Project involves replacing a retired coal-fired power plant with a new natural gas-fired facility. The Application shows the Project will result in a significant net decrease in emissions of Nitrogen Oxides (NOx) and Carbon Monoxide (CO) compared to the actual emissions from the former plant. Because of this net decrease, the Project "netted out" of the PSD and Nonattainment New Source Review (NNSR) programs for those two pollutants.

[11] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.

However, the Project is located in the Ozone Transport Region (OTR) and its potential emissions of Volatile Organic Compounds (VOCs) exceed the 40-ton-per-year significance threshold. This triggers NNSR, which requires the facility to apply the Lowest Achievable Emission Rate (LAER) for VOCs. LAER is the most stringent control technology achieved in practice and does not consider cost. To comply with NNSR, the facility is also required to purchase and surrender 369.035 tons of VOC Emission Reduction Credits (ERCs) to offset its emissions.

For all other pollutants and sources, the facility is required to install and operate Best Available Technology (BAT) to minimize emissions and will be subject to stringent, federally enforceable emission limits.

Finally, Homer City performed an inhalation risk assessment on 53 chemicals of potential concern (COPC) that would be emitted from the facility. The COPCs that are listed as a carcinogen by a mutagenic mode of action by the EPA were identified because children are more susceptible to cancer and tumor development if exposed to mutagenic carcinogens. To account for this increased susceptibility, an age-dependent adjustment factor was applied to each mutagenic COPC. The excess lifetime cancer risk (ELCR) evaluated the continuous lifetime exposure from birth through adulthood for the mutagenic COPCs. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the ELCR, chronic noncancer risk, and acute noncancer risk would not exceed DEP's benchmarks.[12] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period.

The benchmark values for acute, chronic and cancer risks from inhalation exposures are based on toxicity values (RfCs and IURs) that are derived using a conservative weight-of-evidence approach. RFCs, used as benchmarks for acute and chronic noncancer risks, are based on the most sensitive health effect and include uncertainty factors that account for methodological limitations, species differences and sensitive populations. IURs for cancer risks are developed using a conservative modeling approach that is likely to overestimate the cancer risk.

Comment: *Commenter states the plant will release massive amounts of knowns carcinogens and VOC's causing serious health problems, particularly affecting children.* Commenters 20, 25, 73, 91, 92, 564, and 565.

Response: For its Application, Homer City performed an inhalation risk assessment on 53 chemicals of potential concern (COPC), which included carcinogens and VOCs, that would be emitted from the facility. The COPCs that are listed as a carcinogen by a mutagenic mode of action by the EPA were identified because children are more susceptible to cancer and tumor development if exposed to mutagenic carcinogens. To account for this increased susceptibility, an age-dependent adjustment factor was applied to each mutagenic COPC. The excess lifetime cancer risk (ELCR)

[12] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.

evaluated the continuous lifetime exposure from birth through adulthood for the mutagenic COPCs. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the ELCR, chronic noncancer risk, and acute noncancer risk would not exceed DEP's benchmarks.[13] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period.

In summary, the DEP has determined that the stringent, enforceable limits in this Plan Approval are protective of public health. The conditions in the permit do not allow the emission of carcinogens and VOCs above levels that have been demonstrated to be safe. The health benchmarks used in our review are inherently conservative, as they are based on the most sensitive health effects and include margins of safety to protect the most sensitive populations, including children.

Comment: *Commenter states the facility would also emit high levels of volatile organic compounds, nitrogen oxides, carbon monoxide, particulate matter, and cancer-causing hazardous air pollutants, like formaldehyde which are going to increase mortality and sickness in the community. What are the numbers for the increase in expected mortality and sickness associated with the vast emissions increase of a project the size proposed for Homer City will release into the community? What is the expected direct medical costs of these increased mortality and sickness associated with the proposed Homer City plant?* Commenters 35, 66, 69, 97, and 98.

Response: Under the Clean Air Act, DEP is required to ensure that emissions from any new facility would not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). These standards are set by EPA at levels necessary to protect public health with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals with respiratory conditions. The standards are also designed to protect public welfare from any known or anticipated adverse effects, which includes protecting crops and vegetation.

Homer City performed air dispersion modeling to determine compliance with the NAAQS. The air dispersion modeling for the NAAQS accounted for total emissions that will be emitted from the facility, not just the significant net emissions increase. This analysis conservatively predicts the concentration of pollutants at all locations in the surrounding area. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that the emissions from the proposed facility would not cause or contribute to a violation of the NAAQS.

Finally, Homer City performed an inhalation risk assessment on 53 chemicals of potential concern (COPC) that would be emitted from the facility. The inhalation risk assessment accounted for total emissions of COPCs. The inhalation unit risk (IUR) is a value used to estimate the potential excess lifetime cancer risk (ELCR) and represents a lifetime of continuous exposure (24 hours/day for 70 years). The acute

[13] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.

and chronic reference concentrations (RfC) used to calculate the chronic noncancer risk and acute noncancer risk are established to prevent respiratory illness and premature death. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the ELCR, chronic noncancer risk, and acute noncancer risk would not exceed DEP's benchmarks.[14] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period. . Therefore, the DEP has concluded that the "increase in expected mortality and sickness" the commenter is concerned about is not anticipated from this Project.

7. Emissions of Specific Pollutants.

Comment: *Commenter requests the entire list of estimated contaminants from this planned gas plant.* Commenter 42.

Response: The complete, detailed list of estimated air contaminants and their facility-wide potential to emit (PTE) is provided in the plan approval Application (PSD Application HomerCity-July2025-final.pdf) and is summarized in the DEP's Technical Review Memo (Tech Review Memo Homer City Generation 32-00457A.docx). The primary criteria pollutants and their total potential to emit in tons per year (tpy) are as follows:

- Particulate Matter (PM): 843.21 tpy
- PM10: 842.20 tpy
- PM2.5: 840.02 tpy
- Nitrogen Oxides (NOx): 1,142.8 tpy
- Carbon Monoxide (CO): 1,104.8 tpy
- Volatile Organic Compounds (VOC): 332.16 tpy
- Sulfur Oxides (SOx): 211.76 tpy
- Sulfuric Acid Mist (H2SO4): 165.73 tpy
- Greenhouse Gases (CO2e): 17,551,454 tpy

The full criteria pollutant breakdown by source is available in Table 3-7 of the Application.

The facility is also a major source of Hazardous Air Pollutants (HAPs), with a facility-wide potential to emit of 57.1 tpy. The HAPs with the highest emission rates are:

- Formaldehyde: 32.2 tpy
- Toluene: 9.58 tpy
- Xylene: 4.72 tpy
- Acetaldehyde: 2.94 tpy
- Ethylbenzene: 2.35 tpy
- Propylene Oxide: 2.13 tpy

[14] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.

A comprehensive list of all estimated HAP emissions is available in Table 3-5 and Table C-2 of the PSD Application.

a. *Ammonia.*

Comment: *Commenters requested the facility's Nitrogen Oxides (NOx) control devices be subject to a lower maximum ammonia "slip rate" limit of 2 parts per million volume dry (ppmvd).* Commenters 3 through 15; 35, 93, 559-563, 573, and 569.

Response: Ammonia slip is the amount of ammonia emitted because it has not reacted in the NOx control devices, in this Application, the SCR. The DEP determined the 5.0 ppmvd ammonia "slip" limit to be Best Available Technology (BAT) for SCR controls on the seven General Electric Model 7HA.02 turbines based on the size of the turbine and inlet NOx concentrations. The DEP's review of the EPA's RACT/BACT/LAER database (RBLC) confirmed that facilities with lower ammonia slip limits were either smaller turbines or had much lower inlet NOx concentrations. RBLC is a searchable, public database maintained by the U.S. Environmental Protection Agency (EPA). This database contains information on air pollution control technologies and emission limits from permits issued by state and local agencies across the country. Its primary purpose is to help permit reviewers (like us at DEP) and applicants (like Homer City) in determining the most effective control technologies for a new or modified source. It is the main tool used to conduct BACT or LAER analysis. For this Project, Homer City was required to search the RBLC for similar natural gas-fired turbines to identify what emission limits and control technologies are "achieved in practice," which is the basis for the BACT and LAER determinations. While this turbine model is more efficient than its predecessor model, General Electric confirmed that consistently achieving a 2.0 ppmvd ammonia slip limit is not technically feasible for this specific turbine model. Therefore, an ammonia slip of 5.0 ppmvd for the SCR is BAT for this application.

Comment: *Commenters state unlike the historic coal plant, this much larger fracked-gas power plant could emit 910 tons of ammonia annually. Ammonia smells like cat urine, and it can form fine particulate matter when reacting with other gasses in the air, which may increase rates of respiratory illnesses and premature death.* Commenters 35, 40, 42, and 569.

Response: Homer City performed an inhalation risk assessment on 53 chemicals of potential concern (COPC), which includes ammonia, that would be emitted from the facility. The acute and chronic reference concentrations (RfC) used to calculate the chronic noncancer risk and acute noncancer risk are established to prevent respiratory illness and premature death. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the chronic noncancer risk and acute noncancer risk from ammonia emissions would not

exceed DEP's benchmarks.[15] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period.

The likelihood of nuisance odors due to ammonia emissions from the proposed Homer City Generation Project is also low. In response to commenters' concerns on the proposed Homer City Generation Project's ammonia emissions potentially resulting in odors downwind of the facility, the DEP performed dispersion modeling to simulate ammonia's dispersion in the atmosphere and evaluate its potential to cause nuisance odor conditions. The dispersion modeling conducted for ammonia odor evaluation generally followed Homer City's methodology, which used AERMOD, for its acute inhalation risk assessment but with changes in sources modeled, emission rates entered, and meteorological datasets used.

For the sources modeled, only the ammonia-emitting sources, which are seven (7) combined-cycle combustion turbines and ten (10) simple-cycle aeroderivative gas turbines, were included in the odor dispersion modeling.

Similar to Homer City's acute inhalation risk assessment, continuous operations were assumed to be more protective of public health and environment. Maximum 1-hour emission rates entered in the model were adjusted to account for the nature of odor perception. The concentrations modeled by AERMOD is on a 1-hour basis. However, odor perception is proportional to the instantaneous or short-term peak concentrations. To convert 1-hour average concentrations modeled by AERMOD to short-term peak concentrations, the DEP utilized the power law relationship.[16,17,18,19,20]

A literature review was conducted by the DEP to establish an odor threshold for ammonia to be used in this odor evaluation. Ammonia is a colorless

[15] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.
[16] Karageorgos, P., et al. 2010. Characterization and Dispersion Modeling of Odors from a Piggery Facility. Journal of Environmental Quality., 39:2170–2178.
[17] Page, T., and Guy, C. 1997. Odor Dispersion Modeling. Air & Waste Management Association's 90th Annual Meeting & Exhibition, June 8-13, 1997, Toronto, Ontario, Canada.
[18] AMIGO & Olores.org. 2023. International Handbook on the Assessment of Odour Exposure using Dispersion Modelling.
[19] Schauberger, G., and Piringer, M. 2004. Assessment of the odour concentration in the near-field of small sources. European Conference on Environmental Odour Management. Cologne – 17-19 November 2004.
[19] Schauberger, G., and Piringer, M. 2004. Assessment of the odour concentration in the near-field of small sources. European Conference on Environmental Odour Management. Cologne – 17-19 November 2004.
[20] Golder, D. 1972. Relations Among Stability Parameters in the Surface Layer. Boundary-Layer Meteorology 3, 47-58.

gas with a strong irritating odor.[21,22] Based on Smeets M. A. M., et al. (2007)[23], one of the studies cited by American Industrial Hygiene Association (AIHA)[24], the odor detection threshold for ammonia, or the lowest level of ammonia in the air that individuals can detect, is 1,800 micrograms per cubic meter (µg/m^3). According to the Centers for Disease Control (CDC)[25] and AIHA, threshold values[26] for ammonia vary widely across studies, ranging between 30 and 44,000 µg/m^3, due to individual differences in odor sensitivity and variations across study methods. For practical purposes, odor thresholds in the middle of the range better represent the amount of a substance in the air that most people are likely to detect and can be used to prevent nuisance odor conditions.[27] Therefore, a value of 1,800 µg/m^3 (2.6 ppm) was chosen as the ammonia odor threshold because it was based on a study that utilized standardized and sound procedures in measuring odor detection thresholds and, at the same time, aligns with odor thresholds cited by various governmental agencies, such as EPA and CDC, and professional associations, such as AIHA.

Based on the DEP's odor dispersion modeling, none of the modeled 1-minute concentrations and 30-second concentrations over the 5-year period exceeded the 1,800-µg/m^3 ammonia odor threshold used in this odor evaluation. The highest 1-minute concentration modeled was 388 µg/m^3, which is approximately 22% of the ammonia odor threshold. The highest 30-second concentration was 621 µg/m^3, which is approximately 35% of the ammonia odor threshold. For illustration purposes, below are isopleths[28] of the percentages of the highest 1-minute and the highest 30-second modeled ammonia concentrations relative to the 1,800-µg/m^3 ammonia odor threshold. The location with the highest modeled ammonia concentration is within 400 meters north of Homer City's plant boundary.

All input and output files associated with the DEP's air dispersion modeling for the ammonia odor evaluation are available upon request.

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[21] Agency for Toxic Substances and Disease Registry (ATSDR). 2024. Toxicological Profile for Ammonia. https://www.atsdr.cdc.gov/toxprofiles/tp126.pdf. Accessed September 25, 2025.

[22] Centers for Disease Control (CDC). 2024. Chemical Fact Sheet: Ammonia. www.cdc.gov/chemical-emergencies/chemical-fact-sheets/ammonia.html. Accessed September 29, 2025.

[23] Smeets M. A. M., et al. 2007. Odor and irritation thresholds for ammonia: a comparison between static and dynamic olfactometry. Chemical Senses 32(1):11-20.

[24] American Industrial Hygiene Association (AIHA). 2024. Odor Thresholds for Chemicals, 4th ed. AIHA, Falls Church, VA.

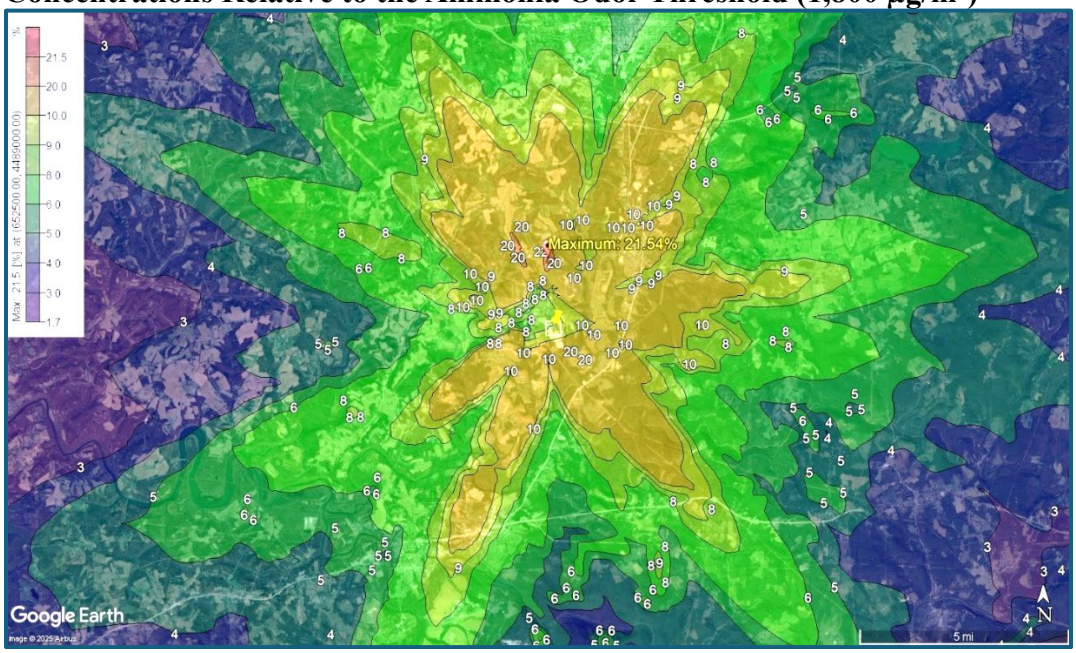
[25] Centers for Disease Control (CDC) 2024. Understanding Your Risk for Environmental Odors. https://www.atsdr.cdc.gov/odors/populations-at-risk/. Accessed September 29, 2025.

[26] In the American Industrial Hygiene Association (AIHA) document, the type of odor threshold values was reported as either odor detection (i.e., the lowest concentration that humans can smell) or odor recognition (i.e., the concentration at which you can identify an odor).

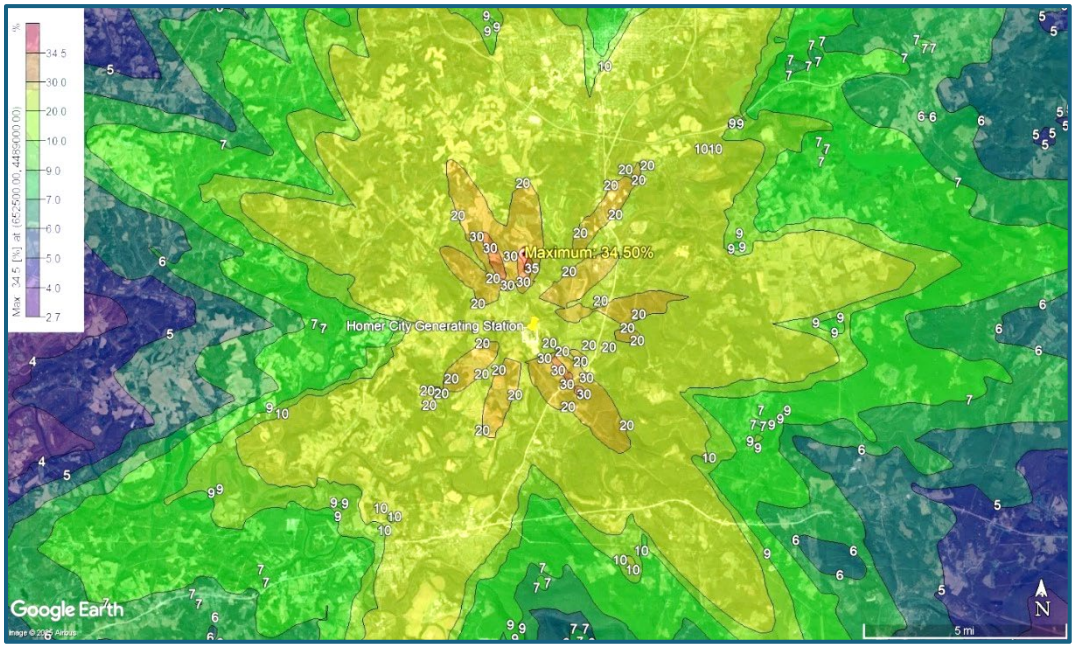
[27] Texas Commission for Environmental Quality (TCEQ). 2015. Position Paper Final, September 1, 2015: Approaches to Derive Odor-Based Values. https://www.tceq.texas.gov/downloads/toxicology/dsd/position-white-papers/odor.pdf. Accessed September 29, 2025.

[28] The isopleths were generated using AERMOD View™ of Lakes Environmental Software and, to have aerial imagery, exported to Google Earth Pro.

Isopleths for Percentages of the Highest 1-Minute Ammonia Concentrations Relative to the Ammonia Odor Threshold (1,800 µg/m^3)



Isopleths for Percentages of the Highest 30-Second Ammonia Concentrations Relative to the Ammonia Odor Threshold (1,800 µg/m^3)



Comment: *Commenter asked with 910 tons of ammonia every year, which combines without other emissions to produce noxious dust and debris, who will monitor this, and who will clean it up?* Commenter 36.

Response: The 910 tons per year (tpy) figure referenced by the commenter is very close to the facility's calculated *potential to emit* for the seven main combined-cycle turbines, which is 914 tpy. (The total potential for all 17 turbines is 1,002.7 tpy). These potential emission figures are the calculated, worst-case result of the facility operating 24/7/365 while continuously meeting its legally enforceable Best Available Technology (BAT) limit.

The DEP acknowledges that ammonia can react in the atmosphere to form fine particulate matter (PM2.5), which the commenter refers to as "noxious dust." This secondary PM2.5 formation was a required part of the air quality modeling analysis. The DEP's review of that analysis, which is summarized in our PSD modeling memo, confirmed that the facility's total PM2.5 impact (from both direct emissions and this secondary formation) will not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). These standards are set by the EPA to be protective of public health.

Homer City is required to monitor ammonia slip continuously, and the DEP will receive the data for compliance review. The Plan Approval mandates that the facility install, certify, and operate a continuous ammonia monitoring system on all 17 turbine stacks. This system continuously calculates the ammonia slip to ensure compliance with the 5.0 ppmvd limit at all times. Complying with this limitation should mitigate the potential for particulate accumulation as “dust or debris.”

Comment: *Homer City Incorrectly Dismissed Similar Facilities in Determining BAT Emission Rates for Ammonia, Resulting in an Impermissibly High Limit.* Commenter [Clean Air Council No.]

Response: The DEP conducted a thorough, case-by-case review of Homer City's Best Available Technology (BAT) analysis for ammonia (NH3) and determined that the proposed limit of **5.0** ppmvd @ 15% O2 is appropriate and satisfies the BAT requirement for this specific Project. The commenter's argument for a 2.0 ppmvd limit is based on permits for other facilities (e.g., Renovo, Killingly, CPV Towantic) that the DEP finds are not valid comparisons for establishing BAT for this Project. The commenter cites the permits for the Renovo Energy Center and Killingly Energy Center as evidence of a 2.0 ppmvd limit. However, BAT is based on technology that is "available or may be made available" and "achievable". An emission limit in a permit for a facility that was never constructed like Renovo is not a demonstration that the limit has been "achieved in practice" or is continuously "achievable" over the long-term life of a different plant.

The commenter's primary example of an *operating* plant, CPV Towantic, is not a valid comparison. Homer City's BAT analysis, which the DEP concurs with, explicitly addresses this discrepancy in Section 5.2.8.6 of the Application. The turbines at CPV Towantic are GE Model 7HA.01. The turbines proposed for this Project are the newer GE Model 7HA.02. As stated in the Application's BAT analysis, the older model 7HA.01 has a lower operating

temperature which results [in] lower NOx emissions from the turbine exhaust. In contrast, the more efficient and higher output 7HA.02 model operates at higher temperatures leading to comparatively higher NOx emissions directed to the SCR which cannot reliably maintain an outlet concentration of 2.0 ppmvd @ 15% O2. Therefore, the 5.0 ppmvd NH3 slip limit is the rate determined by the manufacturer to be continuously achievable for the 7HA.02 model while that turbine is meeting its stringent 2.0 ppmvd *NOx* limit across a range of operating loads.

The commenter's suggestion to add an ammonia reduction catalyst (ASC) to "catch" the slip would be requiring a "control for a control." The BAT determination was made on the primary control device (the SCR system), and the 5.0 ppmvd limit was determined to be BAT for that system as applied to this specific turbine. Also, as discussed above, DEP determined that emissions of ammonia at the 5.0 ppmvd level are unlikely to cause nuisance odors, so additional control is not necessary. For these reasons, the DEP has determined that 5.0 ppmvd @ 15% O2 represents BAT for this specific source.

b. *Nitrogen Oxides (NOx).*

See comments and responses in Section G.5., above, and Sections G.8 and L. below. Please note the Plan Approval requires stringent Best Available Technology (BAT) limits for NOx of 2.0 ppmvd for the combined-cycle turbines, which are significantly more stringent than the applicable federal NSPS standard of 15 ppmvd.

c. *Volatile Organic Compounds (VOC).*

Comment: *Commenters stated the facility incorrectly claims that 1.0 ppmvd without duct firing of Volatile Organic Compounds (VOCs) and 1.5 ppmvd with duct firing is the LAER. They stated that the LAER is actually more stringent with and without duct firing.* Commenters 3 through 15; 35, 78, 93, 559-563, and 573.

Response: The DEP has re-evaluated the Lowest Achievable Emission Rate (LAER) for Volatile Organic Compounds (VOCs) from the seven combined-cycle turbines in light of the comments received. The DEP's re-evaluation is broken into two parts: operation *without* duct firing and operation *with* duct firing.

VOC Limit (Without Duct Firing): Several permitted facilities, including some with the same GE 7HA.02 turbine model, have permitted VOC limits of 0.7 ppmvd, which is more stringent than the 1.0 ppmvd limit in the draft Plan Approval. Based on this information, the DEP is requiring a more stringent VOC limit without duct firing. DEP will revise the final Plan Approval to lower the VOC limit for the combined-cycle turbines (Source 101, Group 1) during unfired operation from 1.0 ppmvd to 0.7 ppmvd, measured as propane. The DEP has determined that 0.7 ppmvd represents LAER for this operating scenario.

VOC Limit (With Duct Firing): The DEP disagrees with the assertion that the 1.5 ppmvd @ 15% O2 limit for operation *with duct firing* exceeds LAER. The DEP's determination that this limit represents LAER is based on a case-by-case analysis of what is "achieved in practice" for this specific, large-scale equipment configuration. The commenter's argument relies on facilities that are not technically comparable or were never built. The Homer City turbines are equipped with very large duct burners (1,034 MMBtu/hr. each). Firing this much additional fuel into the exhaust stream is fundamentally different from a turbine with a small or non-existent duct burner. The facilities cited by the commenter (e.g., Greensville, C4GT, Lincoln Land, Covert) have duct burners that are 50% to 95% smaller than those at Homer City. These are not comparable sources for a LAER analysis. LAER is the most stringent limit *achieved in practice*. Several of the facilities cited by the commenter (e.g., C4GT, Renaissance, Middlesex) were never constructed. A limit in a permit for a facility that was never built has not been "achieved in practice" and cannot, by itself, define LAER for a new project.

The Lackawanna Energy Center which the commenter cites as having a 1.0 ppmvd limit, was ultimately built *without* duct burners. The RBLC entry for the original *draft* permit, which did include duct burners, had a limit of 1.5 ppmvd—identical to Homer City's VOC limit. The Middlesex Energy Center was not built but the RBLC entry shows the 1.0 ppmvd limit was for *unfired* operation. The limit for *fired* operation was 2.0 ppmvd, which is *less stringent* than Homer City's 1.5 ppmvd limit. Finally, Covert Generating is not a comparable source. It uses a different, smaller turbine (Mitsubishi) and a duct burner that is approximately 75% smaller (256 MMBtu/hr.) than Homer City's (1,034 MMBtu/hr.).

The DEP has determined that 1.5 ppmvd @ 15% O2 is the most stringent limit achieved in practice for this specific class and size of turbine and duct burner. Homer City's LAER analysis, detailed in Section 5.2.3 of the Application, is correct.

d. *Carbon Monoxide (CO).*

Comment: *Commenters stated the facility incorrectly claims that 2.0 ppmvd is Best Available Technology (BAT) for carbon monoxide (CO). They state that every facility researched by Homer City has a lower emission rate of CO and 2.0 ppmvd is not BAT.* Commenter 3 through 15; 35, 37, 78, 93, 559-563, and 573.

Response: Homer City's BAT analysis acknowledged that lower limits exist in the RBLC database. However, the justification for the 2.0 ppmvd @ 15% O_2 limit is based on the technical limitations of Continuous Emission Monitoring Systems (CEMS). DEP's review confirmed that 2.0 ppmvd represents the lowest emission rate that can be continuously and reliably measured to demonstrate compliance. A BAT determination must establish a limit that is not

only achievable but also continuously enforceable, which requires accurate measurement by the CEMS.

The BAT determination is a case-by-case analysis of what is achievable and continuously enforceable for the specific equipment proposed. The commenter correctly identifies several facilities in the RBLC database with permitted CO limits lower than 2.0 ppmvd (e.g., 0.9 ppmvd). The DEP's review of Homer City's BAT analysis (Application Section 5.2.2) found that these lower permitted limits do not represent BAT for this Project because the facilities were never built or are based on different manufacturer's data. Many of the permits cited by the commenter (e.g., Renovo Energy Center, C4GT, Middlesex Energy Center) were for facilities that were never constructed. A "paper limit" in a permit for a facility that was never built is not a demonstration that the limit is "achieved in practice" or "achievable" on a reliable, long-term basis. The BAT analysis must also rely on what is achievable for the *specific* equipment being installed. Homer City has provided information from the turbine manufacturer, GE Vernova, indicating that 2.0 ppmvd is the recommended minimum limit for the 7HA.02 turbine to ensure continuous compliance across all operating loads over the life of the catalyst. While the oxidation catalyst can achieve lower rates under ideal, steady-state conditions, the 2.0 ppmvd limit is the lowest rate that the manufacturer insists is *consistently* achievable.

The issue is not the *detection limit* of the monitor, but the *enforceability* of the limit relative to the monitor's certified accuracy. CEMS must be certified and audited (e.g., daily calibrations and annual Relative Accuracy Test Audits, or RATAs) according to U.S. EPA Performance Specifications (e.g., 40 CFR Part 60, App. F). The allowable accuracy "drift" for these monitors is typically a percentage of the "span value" (the monitor's full-scale range). When a permit limit (e.g., 0.9 ppmvd) is set at a level that is at or near the monitor's minimum detection level, a minor, legally allowable instrument drift can be larger than the emission limit itself. This makes it technically difficult and legally problematic to distinguish between a minor instrument drift and an actual violation of the permit. The RATA data provided by the commenter simply shows that a turbine was operating at near-zero emissions *at that moment*. It does not demonstrate that a CEMS can be certified to *enforce* a 0.9 ppmvd limit 24/7/365, nor that the facility can meet that limit under all operating conditions.

The DEP has determined that 2.0 ppmvd is the lowest continuously achievable *and* continuously enforceable CO emission rate for this source. This limit is consistent with other modern, large-scale, constructed-and-operating natural gas-fired power plants in Pennsylvania and therefore satisfies the BAT requirement.

e. *Methane.*

Comment: *Commenter states the plant will increase the chance of methane leaks (a greenhouse gas 30% more potent than CO2) through the*

extraction and transport of natural gas, further contributing to climate change. Commenter 20.

Response: While this specific Plan Approval is limited to the air contamination sources at the Homer City facility, DEP does not ignore the "upstream" activities the commenter is concerned about. Those activities are regulated by other specialized DEP programs, including:

- Air quality permits for well pads, compressor stations, and processing plants (e.g., General Permit GP-5), which establish their own BAT and monitoring requirements.

- Erosion and Sediment Control (Chapter 102) and Water Obstruction (Chapter 105) permits for gathering and transmission pipelines.

- Specific state and federal regulations designed to control methane emissions from the oil and gas sector, such as the standards in 40 CFR Part 60, Subparts OOOOa - OOOOc, which require Leak Detection and Repair (LDAR) for certain equipment.

This Plan Approval also requires a Leak Detection and Repair (LDAR) program for all new natural gas piping components *at this facility* to control fugitive methane emissions on-site. This comprehensive, agency-wide regulatory approach ensures that the environmental impacts from the entire natural gas supply chain are considered and controlled, consistent with the DEP's constitutional obligations.

f. *Particulate matter (PM)*

See comments and responses in Section G.3. and G.5., above, and Section L. below. Please note that the DEP's review of Particulate Matter (PM) was a central part of this permitting process, as the Project triggered PSD review for PM, PM10, and PM2.5.

g. *HAPs*

See comments and responses in Section G. 4 and G. 6, above.

h. *GHGs*

See comments and responses in Section I, below.

8. Ground Level Ozone.

Comment: *Commenters state the 10 proposed diesel backup generators will contribute to ground-level pollution* Commenters 30, 32, 49, and 79.

Response: For its Application, Homer City performed air dispersion modeling to determine compliance with the National Ambient Air Quality Standards (NAAQS) and to support an inhalation risk assessment. The air dispersion modeling accounted all emission sources, including the diesel-fired emergency generators. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that the emissions from the proposed facility would not cause or contribute to a violation of the NAAQS. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the excess lifetime cancer risk (ELCR), chronic noncancer risk, and acute noncancer risk would not exceed DEP's benchmarks.[29] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period. Also, see the following comment and response.

Comment: *Commenters state the pollutants released by the proposed power plant, particularly NOx and VOCs, are known to create hazardous ground-level ozone, which is detrimental to human health and vegetation and expected increase in sickness and mortality.* Commenters 30, 32, 49, 55, 64, 66, 79, 97, and 98.

Response: The DEP's review, required under state and federal law, ensures that this Project will result in a net air quality benefit regarding the two pollutants that form ground-level ozone: Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOCs). For NOx, Homer City performed a regulatory "netting analysis" comparing the new turbines to the baseline actual emissions from the retired coal boilers. This analysis, which the DEP has reviewed and approved, demonstrates that the Project will result in a significant net decrease of 889.0 tons per year of NOx emissions. This removes a large quantity of ozone-forming pollution from the local air shed. For VOCs, the Project's net increase in VOCs triggers Nonattainment New Source Review (NNSR), the most stringent air permitting program. This program mandates that the facility install Lowest Achievable Emission Rate (LAER) controls, which are the most stringent controls achieved in practice, regardless of cost, and the facility must purchase and permanently surrender 369.035 tons of VOC Emission Reduction Credits (ERCs) to offset its new potential emissions of 332.16 tpy at a 1.15-to-1 ratio.

The NOx emission controls proposed here for both types of turbines, are Dry Low-NOx combustion controls plus Selective Catalytic Reduction for NOx removal. These are tried and true emission reduction technologies, that have been accepted as Best Available Technology, and used by other new natural gas fired power plants in Pennsylvania. These technologies will allow the Homer City turbines to emit far less NOx (2 parts per million) than required by the federal turbine regulations (15 parts per million).

A specific VOC, formaldehyde, is limited by the federal 40 CFR Part 63, Subpart YYYY regulations and imposes a very stringent emission limit of 91 parts per billion. The oxidation catalysts proposed here will allow compliance with this limit. As part of the Inhalation Risk Assessment, the remaining formaldehyde that will be emitted was deemed within acceptable human health levels.

[29] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.

Because the Project results in a significant net *decrease* of NOx and a net *decrease* of VOCs (through the required 1.15-to-1 offset ratio), the Project is not expected to contribute to ground-level ozone formation. Therefore, an increase in sickness or mortality from Project-created ozone is not anticipated. The entire regulatory review process for ozone precursors is designed to ensure the facility does not cause or contribute to a violation of the National Ambient Air Quality Standard (NAAQS) for ozone, which is set at a level to protect public health.

9. New Source Review Alternatives Analysis.

Comment: *Homer City Failed to Properly Conduct an Alternative Analysis as Required by New Source Review Regulations.* Commenter 78.

Response: The DEP has reviewed Homer City's "Alternative Sites, Sizes, Production Processes, [and] Environmental Control Techniques" analysis, which is required by 25 Pa. Code § 127.205(5) and provided in Section 4.5.6.2 of the Application. Section 127.205(5) requires an *analysis* of alternative sites, not necessarily the selection of a different site. Homer City's analysis stated that no alternative sites were considered because one of the Project's fundamental purposes is the redevelopment of the former Homer City Generating Station, a brownfield site. This site is uniquely suitable for a large-scale power Project, as it already possesses the required high-voltage transmission interconnections, an available water supply, and is appropriately zoned for power plant operations. The site has adequate separation from neighboring properties to minimize potential nuisances such as noise and odor. Redevelopment of this relatively flat and stable site also requires minimal wetland disturbance and minimal impacts to special protection waters. The DEP finds this to be a reasonable analysis and justification, as comparing this brownfield redevelopment to a new "greenfield" site (which would lack all of this critical infrastructure) would not be an equivalent alternative. The building-out of new infrastructure to support the Project in a different location would result in additional land disturbances, linear corridor impacts, and environmental impacts.

Homer City *did* evaluate renewable energy alternatives, as the commenter notes. The analysis concluded these alternatives were not viable for this Project's stated purpose of providing 4,678 MWe of dispatchable (on-demand) base-load power, citing the intermittent availability of wind and solar and the need for significant additional energy storage. The scale and building footprint of the additional energy storage needed to meet the Project's purpose would require more disturbance and delay the availability of the power. Homer City also correctly identified the vastly different land-use requirements, estimating a comparable solar project would require 13,380 acres versus the approximately 200-acre footprint for this Project. The proposed Project uses roughly .04 acres of land per megawatt of energy produced compared to 2.86 acres per megawatt for solar and almost 82.4 acres per megawatt for wind.

The commenter's central claim that Homer City "makes no attempt to demonstrate that the benefits... significantly outweigh the... costs" and provides "zero discussion of the environmental and social costs" is fundamentally incorrect. The "environmental and social

costs" are, in fact, the subject of the entire 500+ page PSD Application. The Application exhaustively analyzes these costs through:

1. Detailed emission calculations (Appendices B & C).
2. A 60+ page BACT/LAER/BAT analysis (Section 5) demonstrating that these "costs" (emissions) are minimized to the maximum degree achievable.
3. A 60+ page Air Quality Impact Analysis (Sections 6-8) demonstrating that these "costs" (emissions) will not violate any National Ambient Air Quality Standards (NAAQS) set to protect public health.
4. A comprehensive Inhalation Risk Assessment (IRA), which DEP's technical review confirmed is below all protective health benchmarks.

The "benefits" identified by Homer City are the redevelopment of a brownfield site, the reuse of existing infrastructure, and the provision of 4,678 MWe of dispatchable power to the grid. This enhanced grid capacity and reliability is being achieved through the transition from coal to more efficient and less polluting natural gas-fired turbines. Homer City projects 250 permanent jobs during normal operation of the plant. The DEP's review confirms Homer City performed the required analysis. The DEP has determined that the Project's benefits (providing 4,678 MWe of power on a redeveloped industrial site) have been appropriately weighed against its "costs" (the *controlled* and *minimized* emissions), which have been demonstrated to be protective of public health and the environment.

Furthermore, the selection of large, high-efficiency **combined-cycle** turbines (the GE 7HA.02 units) as the primary production process represents Best Available Control Technology (BACT) for greenhouse gases. An alternative production process, such as using a larger number of smaller **simple-cycle** turbines to achieve the same 4,678 MWe capacity, would be environmentally inferior. Simple-cycle units are significantly less efficient as they do not capture waste heat to power a secondary steam turbine. The permit's own emission limits demonstrate this: the combined-cycle units are limited to **800 lb CO2/MWh**, while the simple-cycle units are limited to **1,425 lb CO2/MWh**. Therefore, Homer City's analysis correctly selected the most efficient and lowest-emitting fossil fuel technology for its dispatchable power block.

H. Associated Growth and Data Centers.

Comment: *Commenters asked about data center development, emissions from data centers, and the water requirements for the operation of data center, adding that the proposed plant and data centers pose a significant threat to the health of all citizens. Commenters* 1,17, 20 30, 32, 35, 39, 40, 42, 68, 81, 547, 569, 567, 566, and 568.

Response: The Application reviewed by the DEP, and the subject of this Plan Approval, is for the natural gas-fired electrical generating station and does not authorize the construction or operation of any data centers. While Homer City has publicly identified the potential for development of data centers and other uses in adjacent areas, no specific use of adjacent areas have been confirmed. Accordingly, DEP cannot speculate as to any sources of additional air contamination or the potential for environmental or human health impacts of

future uses of the adjacent areas. However, as development progresses, DEP will be able to address impacts, if any, through its regulatory authority.

With regard to the air quality from the power plant, the DEP has insured that emissions will not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). These standards are set by the EPA at levels necessary to protect public health with an adequate margin of safety. Homer City performed a detailed air quality modeling analysis, which was reviewed by the DEP, demonstrating that emissions from this facility will **not** exceed these health-based standards. Furthermore, the permit requires continuous emissions monitoring for key pollutants to ensure compliance at all times.

Comment: *Homer City Failed to Properly Evaluate the Additional Impact of Associated Growth.* Commenter 78.

Response*:* The DEP has reviewed Homer City's "Additional Impacts Analysis" for growth, which is required by 40 CFR § 52.21(o) and is provided in Section 9.3 of the PSD Application. The commenter's concerns about that analysis are in three parts: 1) residential and commercial growth; 2) growth of data centers; and 3) growth of upstream gas infrastructure. First, DEP agrees with Homer City's analysis that the construction and operation workforce will be drawn primarily from the existing regional population and that the Project will not induce significant new residential or commercial growth. The Project is a redevelopment of an existing industrial site, not a new "greenfield" project that would create a new population center. While a large number of construction workers will be needed, when completed, the plant will employee the same number of people as the former coal plant. Accordingly, no large influx of permanent residents or associated housing or commercial needs are anticipated.

Second, the commenter asserts that Homer City must quantify and model emissions from potential future data centers as part of this Project's "associated growth." However, specifics for any potential data center projects are not known from a size, location or technology perspective. Thus, emissions from any potential, future data centers are not well-defined nor quantifiable at this time. Any future data center, if it meets the definition of a "major source," will be subject to its *own* independent New Source Review and/or PSD permitting process. The DEP will conduct a full technical review, including a separate BACT/LAER analysis and air quality modeling, for any such project if and when an Application is submitted. Further, if and when a data center associated with the power plant is proposed to DEP, DEP may require additional modeling or analysis for the power plant.

Finally, the commenter asserts that the analysis must include emissions from future gas wells, pipelines, or compressor stations needed to supply the plant. "Upstream" emissions associated with fuel production and transport are not defined as "secondary emissions" or "associated growth" for the purposes of a PSD review for the end-user (the power plant). Further there is no basis to conclude that additional natural gas source development will be necessary to supply the fuel for this Project so speculation about emissions from future gas wells, pipelines, or compressor stations is improper.

Comment: *Commenter states the pollution from the Project, increased healthcare and energy costs, and the evils of data centers are problems that affect people not just across the Commonwealth, but across the country.* Commenter 75

Response: The DEP acknowledges the commenter's concerns, which cover several distinct topics: air pollution and associated health costs, energy costs, and data centers. This Plan Approval authorizes the construction and operation of a natural gas-fired electrical generating station only. The Application reviewed by the DEP is for the power plant and does not authorize the construction or operation of any data centers.

While Homer City has publicly identified the potential for development of data centers and other uses in adjacent areas, no specific use of adjacent areas have been confirmed. Accordingly, DEP cannot speculate as to any sources of additional air contamination or the potential for environmental or human health impacts of future uses of the adjacent areas. Similarly, the DEP cannot speculate on energy use by additional development or any associate effect on energy cost.

I. Climate Change.

Comment: *Commenters state this plant would potentially contribute over 17 million tons of greenhouse gases each year into the air and Pennsylvania will not be able to achieve its climate goals and will put itself further on the path of climate crisis.* Commenters 18, 21, 23, 30, 32, 34, 35, 36, 37, 45, 46, 47, 48, 50, 52, 53, 55, 58, 59, 60, 61, 62, 63, 78, 79, 80, 81, 82, 84, 85, 88, 93, 94, 95, 96, 100-543, 544, 547, 17, 561, 563, 546, 548, 549, 550, 551, 552 553, 554, 555, 556, 557, 558, and 566.

Response: The DEP acknowledges the commenters' concerns regarding greenhouse gas (GHG) emissions. The referenced 17.5 million tons of carbon dioxide equivalent (CO2e) represents the facility's "potential to emit" (PTE). This is a required, worst-case regulatory calculation that assumes all 17 turbines operate at maximum capacity, 24 hours a day, 365 days a year. Actual emissions will be dictated by electricity demand and are expected to be lower, in part due to planned maintenance outages for the individual turbines. Because the Project's potential GHG emissions exceed the 75,000 tpy significance threshold, it triggered Prevention of Significant Deterioration (PSD) review, which mandates that Homer City conduct, and DEP approve, a Best Available Control Technology (BACT) analysis to ensure the maximum achievable reduction of GHG emissions.

The DEP reviewed and concurred with Homer City's BACT analysis for GHGs, which is detailed in Section 5 of the Application. Carbon Capture and Sequestration (CCS) was evaluated and determined to be technically infeasible based on the lack of commercial availability of CCS for this specific type of combined-cycle turbine. The CO2 concentration in the exhaust from natural gas combustion is significantly more dilute than from coal combustion, making capture much more difficult and energy intensive. Further, CCS requires a network of pipelines for transport and suitable geology for permanent storage. Currently, there is no existing CO2 pipeline infrastructure in Pennsylvania to support this Project, nor are there nearby sequestration sites.

Homer City also analyzed co-firing with low-GHG hydrogen but that was also deemed technically infeasible as it is not "available" or "applicable." Low-GHG hydrogen is not commercially available in the quantities needed for the turbines proposed in the Project, and the infrastructure to transport it to the site does not exist.

With CCS and hydrogen co-firing determined to be technically infeasible, BACT was determined to be the use of new, highly efficient combined-cycle and simple-cycle turbines, firing natural gas, and employing good combustion and operating practices. This is enforced in the Plan Approval through an output-based limit of 800 lbs. CO2e/MWh (gross output) for each combined-cycle unit, which is consistent with the federal New Source Performance Standards (NSPS) under 40 CFR Part 60, Subpart TTTTa. While the former coal-fired plant's Potential to Emit (PTE) was 18,959,820.08 tons per year of CO2e, the PTE for this new, more efficient natural gas-fired Project is 17,551,454 tons per year. This represents a reduction in the facility's maximum potential GHG emissions.

The 2024 PA Climate Action Plan guides future planning for Pennsylvania to address the serious impacts of climate change. It identifies goals and provides a number of strategies to achieve lower and an eventual zero net emissions of carbon. The Plan itself identifies the transition from coal powered electricity generation to natural gas as a primary driver of GHG reductions to date. It also identifies CCS as a key *future* strategy for decarbonizing but recognizes the lack of present infrastructure. Consistent with the Climate Action Plan this Plan Approval authorizes the replacement of coal-fired power sources with more efficient, natural gas-burning sources of power. Further, the Plan Approval incorporates 40 CFR Part 60 Subpart TTTTa, which requires 90% capture of CO2 by January 1, 2032, for new gas-fired base load turbines. The regulation offers flexibility in meeting that standard, but does recognize using CCS as the best system of emission reduction ("BSER").

Comment: *Failing to consistently act to mitigate climate change would condemn Pennsylvanian municipalities to billions of dollars in added costs needed to sustain vital infrastructure and implement necessary resiliency measures.*
Commenter 90.

Response: The DEP acknowledges the commenter's concerns regarding the potential future financial impacts of climate change on Commonwealth municipalities, as detailed in the cited Center for Climate Integrity (CCI) report. The specific costs cited by the commenter—such as future upgrades to municipal stormwater systems, school HVAC, and coastal defenses —are broad, long-term societal and economic policy matters.

The DEP's authority to regulate greenhouse gases (GHGs) in this permit is executed through the federal Prevention of Significant Deterioration (PSD) program, which was triggered by this Project. This program requires the facility to implement Best Available Control Technology (BACT) to minimize GHG emissions to the maximum extent achievable. The DEP reviewed and approved Homer City's BACT analysis. This analysis determined that large-scale mitigation technologies, such as Carbon Capture and Sequestration (CCS), are technically infeasible for this specific Project at this time due to a lack of necessary infrastructure, such as CO2 pipelines. Therefore, BACT was determined to

be the use of new, highly efficient turbines, which is enforced in the permit through a federally enforceable, output-based limit of 800 lbs. CO2e/MWh.

Comment: *If constructed, emissions of carbon-dioxide-equivalents ["CO2e"] from the Proposed Facility would cause approximately 4,000 premature deaths globally for each year in operation.* Commenter 90

Response: The DEP acknowledges the commenter's concern regarding the global impacts of greenhouse gas (GHG) emissions. The specific "mortality cost of carbon" is a global metric that is not based on emission controls or limitations. The DEP regulates GHG emissions through the federal Prevention of Significant Deterioration (PSD) program, which this Project triggered. PSD required Homer City to conduct, and the DEP to approve, a Best Available Control Technology (BACT) analysis to ensure GHG emissions are minimized to the maximum extent achievable. The result of the Project moving from a coal-fired source of electricity to a natural gas fired source is a net reduction in GHG.

As explained in the Response to Comment 16, 46, and 52, above, further reducing or capturing GHG emissions is highly dependent on emerging, but currently infeasible technologies like CCS. The revised Plan Approval will require Homer City to reevaluate those technologies in the future. Finally, as explained in Section L, below, producing the same amount of power from renewable resources would require a vast amount of additional land disturbance and the building of additional interconnection infrastructure defeating one of the purposes of this Project to redevelop a former coal-fired power plant.

J. Renewable Sources.

Comment: *Commenters state Pennsylvania is missing an opportunity to be a national leader in renewable energy and ask why are renewable energy alternatives not considered or required?* Commenter 20, 36, 46, 49, 55, 76, and 78.

Response: As part of the Nonattainment New Source Review (NNSR) requirements under 25 Pa. Code §127.205(5), Homer City was required to conduct an analysis of alternative production processes, which included renewable energy. In Section 4.5.6.2 of the Application, Homer City evaluated solar and wind power. DEP concurs with Homer City's analysis that while these sources would have lower emissions, they were not a viable alternative for this Project's stated purpose of providing 4,678 MWe of dispatchable (on-demand) power without requiring a form of additional energy storage capacity. The analysis also noted the significant difference in land-use requirements. The proposed Project will be built on an approximately 200-acre footprint of a former industrial site, while Homer City estimated a solar project of comparable output would require 13,380 acres and an onshore wind project would require 385,500 acres. Moreover, the use of renewable energy may require the construction of additional interconnection infrastructure in these newly developed areas. By contrast, the proposed location does not require disturbance of "greenfields" and will be limited to approximately 200 acres of redeveloped or "brownfield" land.

The commenter's arguments regarding the comparative levelized cost of energy (LCOE) for wind, solar, and gas, or the potential for wind development on orphaned well sites, are speculative and do not provide the certainty needed for the on-demand power proposed in this Project.

K. Fracking.

Comment: *Commenters expressed concerns with the extensive number of problems with fracking and DEP is not accounting for the increased emissions released by extracting the natural gas (fracking).* Commenters 17, 75, 49, 566, and 568.

Response: The fuel for the combustion sources at the facility will be pipeline-quality natural gas. While the commenter's concerns about "upstream" emissions from natural gas extraction (fracking) and transport are noted, the emissions from these activities are regulated separately by DEP through regulation and permitting of the air contamination sources associated with those activities. The Plan Approval does, however, require a leak detection and repair (LDAR) program for the natural gas piping components located *at the facility* to control any fugitive methane emissions on-site.

L. Article 1, Section 27.

Comment: *Commenter voiced concerns of companies moving in, taking resources, degrading communities, and leaving a mess.* Commenter 22.

Response: This Plan Approval contains strict, federally enforceable emission limits, along with continuous monitoring, testing, and reporting requirements to ensure ongoing compliance and prevent the types of environmental degradation seen historically. Modeling and risk assessments were conducted and shown to be protective of human health and the environment. While the Plan Approval is only for the power plant and air emissions associated with it, the facility is also required to obtain other environmental authorizations before construction and operation to prevent unreasonable degradation, diminution, depletion or other diminishment of Pennsylvania’s public natural resources.

Comment: *Commenters state the proposed power plant is slated to emit three times the highest level of pollutants of any power plant in Pennsylvania - pollutants which cause public health concerns, greenhouse effects, and acid rain, which poses risks to our surface waters, soils, and groundwater.* Commenter 30, 32, 49, 55, and 568.

Response: Public health concerns from proposed air emissions are addressed in Section G. 6, above. While still significant, the potential to emit (PTE) for Greenhous Gases from the Project is approximately 1.4 million tons per year less than the coal-fired electric generating facility. The Best Available Control Technology (BACT) results in a limit of 800 lbs. CO2e/MWh for the new combined cycle turbines and 1,425 lb CO2e/MWh for the simple-cycle turbines. Carbon capture and sequestration, while not presently feasible, may become feasible in the future.

Sulfur Dioxide (SO2) and Nitrogen Oxides (NOx) are the primary precursors to acid rain. This Project will result in a massive net decrease of 4,248.8 tons per year of SO2 as compared to the coal-fired facility. Similarly, the Nitrogen Oxides will decrease by 889.0 tons per year. Therefore, the Project will result in a significant net *benefit* for air quality as it relates to acid rain precursors. For ozone concerns, please see Section G., 8, above.

Comment: *Commenters state that consistent with Pennsylvania's Environmental Rights Amendment, Article. I, Section 27, Pa. Constitution, DEP must conduct a constitutionally sound environmental impact review of the Project that evaluates the Project's contribution to climate change impacts in Pennsylvania. The review will examine how the GHG emissions from the Project will affect (a) Pennsylvanians' rights to clean air, pure water, and the preservation of the natural, scenic, historic, and aesthetic values of the Commonwealth's environment, and (b) the Commonwealth's public natural resources. Commenters also state the Project conflicts with our state constitution's injunction to steward Pennsylvania's environment responsibly to preserve clean air, clean water and an intact and healthy environment for subsequent generations. It is not fair or just or reasonable that the people who will make money from the plant get to pollute these resources that belong to all of us. At some point, we need to wake up and stop allowing this pollution to continue simply because we have allowed it in the past.* Commenters 553 and 554. Commenters 30, 31, 32, 35, 49, 55, 79, 93, 561, 563, 545, 553, 554, and 573.

Response: The Department agrees that Article I Section 27 of the Pennsylvania Constitution must be satisfied, and that in accordance with the Constitution, DEP must consider the environmental effects of the agency's action and must determine that the action will not result in unreasonable degradation, diminution, depletion or deterioration of the environment. DEP also recognizes that it must satisfy its trustee duties under Article I, Section 27 of the Constitution. This Plan Approval is one of many authorizations needed for this Project. DEP's Community Page, found here: DEP Homer City Community Page, contains all of the associated authorizations applied for to date. This comment and response document addresses the Department's consideration of the environmental impacts associated with the Plan Approval. DEP notes however, that the agency staff have coordinated across programs and will continue to do so related to future Applications associated with other aspects of the development of this Project, to ensure a holistic review.

Significant statutory and regulatory requirements have been established to protect the Commonwealth's air quality consistent with the requirements of Article I, Section 27. Those requirements address air pollution that is associated with climate change.

This Plan Approval meets these applicable statutory and regulatory requirements and is protective of human health and the environment. Compliance with the Constitution, statute and regulations is shown by, among other things, the Application, the iterative review undertaken by the Department as described in the review memoranda, internal coordination among DEP staff with regulatory oversight of this Project, as well as coordination with the DEP Energy Office staff regarding the DEP Climate Action Plan, consideration of input from other Article I, Section 27 trustees, as well as the limitations and special conditions of the plan approval, and consideration of public comments.

In response to public comments received regarding the Project, DEP imposed additional conditions or made changes that will require more frequent stack testing for PM, HCHO, ammonia slip and VOC emissions, and a tighter VOC emissions limit for the combined cycle turbines when there is no duct burner firing.

The opportunity for comments and input was specifically provided to Center Township, Blacklick Township, and Indiana County. The Townships and County, fellow Article I Section 27 trustees, submitted no comments to the Department regarding this Plan Approval. The DEP did not receive any comments from any other Commonwealth government entities.

The Plan Approval appropriately considers environmental impacts, which will be controlled in accordance with the constitution, the statute and regulations which are applicable to this Project. The Project will exceed minimum regulatory requirements and will not jeopardize human health and safety. The Project also will create employment and revenue and bring new industry to the Commonwealth.

Comment: *Commenters state there will be excessive pollution of water, noise from generators, and life threatening air quality.* Commenter 31.

Response: DEP regulations require the facility to comply with all local, state and federal requirements. The combined cycle turbines for the proposed facility will have noise suppression incorporated into the design. The turbine manufacturer guarantees less than 85 decibels at 10 ft from the turbine. DEP's Clean Water Program in the Northwest Regional Office is lead within the agency responsible for oversight of water impacts from the Project. Air Quality Program staff reviewing this plan approval have coordinated with the other DEP programs, including the water staff. Please see the Homer City Redevelopment Project webpage for more detail regarding the water permits that have been issued, as well as information regarding pending permit Applications being managed by other DEP staff.

Under the Clean Air Act, DEP is required to ensure that emissions from any new facility would not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). These standards are set by EPA at levels necessary to protect public health with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals with respiratory conditions. The standards are also designed to protect public welfare from any known or anticipated adverse effects, which includes protecting crops and vegetation. For its Application, Homer City was required to perform air dispersion modeling. This analysis conservatively predicts the concentration of pollutants at all locations in the surrounding area. DEP thoroughly reviewed Homer City's air dispersion modeling and concluded that the emissions from the proposed facility would not cause or contribute to a violation of the NAAQS. Finally, Homer City performed an inhalation risk assessment on 53 chemicals of potential concern (COPC) that would be emitted from the facility. DEP thoroughly reviewed Homer City's inhalation risk assessment and concluded that the excess lifetime cancer risk (ELCR), chronic noncancer risk, and

acute noncancer risk would not exceed DEP's benchmarks.[30] The benchmarks serve as standards or reference points in an inhalation risk assessment, below which adverse health effects are unlikely to occur during a specified exposure period.

Comment: *Commenter asks about economic benefit and risks. Will construction jobs be filled by workers out of state? Will there be a possible increase to electricity prices or gas prices? Will there be higher taxes?* Commenter 36, 567, and 568.

Response: Homer City projects that construction of the Project may involve up to 2,500 temporary construction workers while plant operations will require 250 permanent jobs. The source of the construction workforce is unknown, it will likely require many in-state workers to be successful. Because the permanent workforce is comparable to the former coal-fired plant, Homer City projects many of these workers will be from the regional workforce.

Because electricity and gas prices depend on a variety of factors determined by suppliers, transmission entities, and, for electricity, the Public Utilities Commission, DEP cannot speculate on this Project's specific effect on prices. Generally, however, additional electricity production capacity should result in price stability. Similarly, DEP cannot speculate on the effect of the Project on taxes due to the number of variables involved.

Comment: *Commenter requests a legally binding and robust Community Benefits Agreement be put in place.* Commenter 37 and 41.

Response: Community Benefit Agreements are contracts made by the Project developer or owner with local entities or individuals to convey benefits that may not necessarily be required by law or regulation. While the DEP encourages the consideration of these private agreements, without specific statutory or regulatory authority to condition the issuance of permits or other authorizations on entering these agreements, DEP cannot require them.

Comment: *Commenter requested DEP require the portion of their generating capacity that equals that of the former coal fired plant from which they derived air quality credits, be dedicated to the grid for general consumption and not for any local data center consumption.* Commenter 38.

Response: The use of Emission Reduction Credits (ERCs) are strictly regulated under the Clean Air Act and DEP cannot condition the acquisition or use of those credits for certain purposes. Similarly, DEP cannot regulate the availability of electricity. However, the addition of energy base load capacity proposed in the Application is generally consistent with energy needs identified by the Commonwealth.

[30] U.S. EPA, 1998. Region 6 Risk Management Addendum – Draft Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. EPA-R6-98-002. July 1998.

Comment: *Commenter is concerned that generating electricity on this site where grid interconnection infrastructure already exists while making no promise that any electricity will even leave the site due to consumption by local data centers is a huge waste of that interconnection infrastructure.* Commenter 38.

Response: The Application under review is for a natural gas-fired electric power plant only. It does not include the construction or operation of any data centers and Homer City has not confirmed the construction of data center or other associated development. The Application proposes a base load plant that supplies on-demand electricity. The addition of energy base load capacity proposed in the Application is generally consistent with energy needs identified by the Commonwealth.

Comment: *Commenter asks if there is enough electrical power right now on the grid, why do we need to build a new power plant?* Commenter 39 and 569.

Response: The addition of energy base load capacity proposed in the Application is generally consistent with energy needs identified by the Commonwealth. However, determining the need for electricity and managing the reliability of the electrical grid are functions of regional grid operators, such as PJM Interconnection and the New York Independent System Operator (NYISO), and energy market regulators such as the Public Utility Commission. The DEP reviews the plan approval Application submitted by Homer City Generation LP to ensure that the proposed Project, as designed, can comply with all applicable state and federal air quality regulations, including Best Available Technology (BAT) and health-based standards, in a manner that is protective of public health and the environment.

Comment: *Commenter states that economic development in the Commonwealth may include data centers to support AI and other activities, however allowing the use of fossil fuels, with few environmental checks and restrictions, is potentially against the state constitution.* Commenter 76.

Response: As detailed in the preceding responses, the DEP conducted a rigorous technical review of the Project. This included a detailed air dispersion modeling analysis to ensure compliance with the health-based National Ambient Air Quality Standards (NAAQS) and a comprehensive Inhalation Risk Assessment (IRA) to ensure hazardous air pollutant emissions are below the DEP's protective health benchmarks. The DEP has determined that the Project, with the stringent conditions in the Plan Approval, will comply with all applicable environmental laws and will not cause unreasonable degradation to public natural resources. See also the responses in Sections G.9. and J, above.

Comment: *Commenter states the community should receive input on a regular basis.* Commenter 570.

Response: This Plan Approval is a permit to construct. After the facility is built and has demonstrated compliance with the conditions herein, the company must apply for a federally enforceable Title V Operating Permit (or a modification to its existing one) to operate long-term. The process for issuing that Title V Operating Permit will include its own

separate 30-day public comment period, providing another formal opportunity for public input.

Once the facility is operational, the community can provide input at any time by contacting the DEP's Northwest Regional Office to report any air quality concerns, such as odors, visible emissions, or excessive noise. All such complaints are investigated by the DEP. The facility is also required to submit regular compliance reports and data from its Continuous Emission Monitoring Systems (CEMS) to the DEP, which are publicly available records. The community can review this data and notify the DEP of any suspected non-compliance.

Comment: *Commenter encourages the DEP to solicit feedback from environmental groups who may be engaged in volunteer community service monitoring of air quality.* Commenter 570.

Response: The DEP acknowledges the commenter's encouragement and values the feedback and engagement of all community and environmental organizations. The DEP does consider data from community monitoring to be valuable supplemental information. This data can help the DEP identify potential areas of concern and determine where to deploy its own certified monitoring resources or conduct investigations.

Comment: *Commenter states our local economy seeks these jobs but this is not long-term economic solution while dismissing or downplaying the impacts.* Commenter 566.

Response: As explained throughout this comment/response document, the DEP has conducted a rigorous, multi-faceted technical review of all potential health and environmental impacts to ensure they are *not* "downplayed" and are fully protective of public health.

This comprehensive review included:

1. **Air Quality Impact Analysis:** Homer City was required to perform a detailed air dispersion model to predict the downwind concentration of pollutants. The DEP's air quality modeling experts reviewed this analysis and confirmed that the facility's emissions **will not cause or contribute to a violation** of the National Ambient Air Quality Standards (NAAQS). The NAAQS are the federal standards set at levels necessary to protect public health with an adequate margin of safety.

2. **Inhalation Risk Assessment (IRA):** Homer City performed a comprehensive health risk assessment for all hazardous air pollutants, including carcinogens. The DEP's environmental toxicologists reviewed this assessment, concurred with the methodologies, and concluded that the potential cancer and non-cancer health risks from the facility's emissions are **below the DEP's protective health benchmarks**.

3. **Stringent Control Technology:** The facility is required to install the most stringent emission controls available—**Best Available Control Technology**

(BACT) for pollutants like PM and GHGs, and **Lowest Achievable Emission Rate (LAER)** for VOCs.

4. **Net Pollutant Reductions:** The Project will result in a significant **net decrease** in regional emissions of nitrogen oxides (NOx) and carbon monoxide (CO) compared to the former coal-fired plant's operation.

Comment: *Commenter asks why DEP and Homer City Redevelopment are proposing a plant bigger than the one which has been closed for two years?* Commenter 568.

Response: The commenter is correct that the proposed plant's maximum generating capacity of approximately 4,678 MWe is larger than the former coal-fired plant's capacity of approximately 2,000 MWe. Homer City Generation, LP proposed the size (electrical generating capacity) of the facility based on their business determinations and projected market needs, as described in their "analysis of alternative sites, sizes, [and] production processes."

However, from an air quality perspective, the new, modern natural gas-fired facility will result in a significant **net decrease** of several key pollutants compared to the baseline actual emissions of the former coal plant. Based on the netting analysis approved by the DEP, the Project will result in:

- A **decrease** of 889.0 tons per year of Nitrogen Oxides (NOx).
- A **decrease** of 2,991.7 tons per year of Carbon Monoxide (CO).
- A **decrease** of 4,248.8 tons per year of Sulfur Dioxide (SO2).

For pollutants that did have a net emissions increase, such as Particulate Matter (PM), Homer City was required to perform a detailed air quality modeling analysis. The DEP's review of this analysis confirms the Project **will not cause or contribute to a violation** of the National Ambient Air Quality Standards (NAAQS), which are set to protect public health. The facility is also required to install the most stringent control technologies (BACT and LAER) to minimize all emissions.

Therefore, while the electric *capacity* is larger, the DEP has determined that the *air quality impacts* from the new, controlled facility will comply with all health-based standards and will result in a net improvement for several major pollutants.

Comment: *The ERA Provides Fundamental, Substantive Protection Against DEP Action That Worsens the Climate Crisis and Unreasonably Degrades, Diminishes, Depletes, or Deteriorates the Commonwealth's Public Natural Resources.*

Response: The DEP acknowledges its constitutional obligations as a trustee of the Commonwealth's public natural resources under Article I, Section 27 (ERA). The DEP fulfills these constitutional duties through the implementation and enforcement of the environmental laws enacted by the General Assembly, such as the Air Pollution Control Act (APCA). The regulations under the APCA (25 Pa. Code Chapters 121-145) establish the

specific, legally enforceable standards used to protect the environment. The DEP's review of this Plan Approval was conducted to ensure compliance with these standards and in accordance with the agency's trustee duties under the ERA.

The commenter's argument is that this Project constitutes an "unreasonable degradation" of the air resource, particularly regarding climate. The DEP's technical review determined that the Project, as conditioned in the Plan Approval, does not constitute an unreasonable degradation because it meets all applicable health-based standards and minimizes emissions to the maximum extent required by law.

1. **Protection of Local Air Quality (The "Clean Air" Right):** To ensure the "clean air" right is protected for local communities, the DEP's review requires a demonstration that the Project's emissions will not harm public health.

- **NAAQS Compliance:** The DEP's review of Homer City's Air Quality Impact Analysis confirmed that the Project's emissions of pollutants like PM2.5 **will not cause or contribute to a violation** of the National Ambient Air Quality Standards (NAAQS). The NAAQS are the federal standards set at levels necessary to protect public health with an adequate margin of safety.

- **HAP Compliance:** The DEP's review of the Inhalation Risk Assessment (IRA) confirmed that potential risks from all hazardous air pollutants are **below the DEP's protective health benchmarks**.

These analyses provide a concrete demonstration that the Project's *local* air quality impacts are not "unreasonable" and are protective of public health.

2. **Protection of the Climate (The "Global Air" Resource):** The DEP's authority to regulate greenhouse gas (GHG) emissions is executed through the federal Prevention of Significant Deterioration (PSD) program, which mandates a "top-down" Best Available Control Technology (BACT) analysis. This analysis minimizes emissions of all relevant GHGs:

- **Carbon Dioxide (CO2):** The BACT analysis for CO2 evaluated Carbon Capture and Sequestration (CCS) and determined it to be technically infeasible at this time due to a lack of necessary infrastructure, such as CO2 pipelines. BACT was therefore determined to be the use of new, high-efficiency turbines, enforced via a limit of **800 lbs. CO2e/MWh**.

- **Methane (CH4):** The Plan Approval requires a quarterly Leak Detection and Repair (LDAR) program to control fugitive methane emissions from all new natural gas piping.

- **Sulfur Hexafluoride (SF6):** The Plan Approval sets a BACT limit for SF6 leak rates from circuit breakers at 0.5% by weight.

The legal precedents from other states (e.g., *Held v. Montana*, *Matter of Hawai'i Elec. Light Co.*) cited by the commenter are noted, however, the DEP is bound by

the APCA and Pennsylvania law, which provides that Article I, Section 27 cannot be interpreted to provide legal authority to executive agencies beyond what the General Assembly has provided in the statutes the agencies are charged with administering. Not only does the Project meet the APCA, and all applicable regulatory requirements, including the BACT analysis for GHGs and the demonstration of compliance with all health-based NAAQS, the Department is satisfied that the Project will not cause unreasonable degradation of public natural resources.

The DEP has determined that the Project, the permit conditions and the requirement to adhere to the health-based NAAQS and IRA benchmarks, and by mandating BACT for all regulated pollutants (including CO2, CH4, and SF6), the DEP has fulfilled its statutory and constitutional duties.

Comment: *Pennsylvania's Due Process Rights Also Provide Fundamental, Substantive Protections Against DEP Action that Affirmatively Worsens the Climate Crisis.*

Response: The DEP acknowledges the commenter's legal arguments concerning the substantive due process rights to life, liberty, and safety under Article I, Section 1 of the Pennsylvania Constitution.

The DEP's authority is established by the Air Pollution Control Act (APCA), which, along with its regulations, provides the specific legal framework for evaluating permit Applications and protecting public health and safety. The DEP's review has confirmed that this Project meets all applicable requirements of this framework.

The commenter's concern for "personal security" and "health" is the primary purpose of the DEP's health-based review. Our technical review demonstrates that local health and safety are protected:

1. **NAAQS Compliance:** The DEP's review of the Air Quality Impact Analysis confirmed that the facility's emissions of criteria pollutants **will not cause or contribute to a violation** of the National Ambient Air Quality Standards (NAAQS). These standards are set by the EPA at levels necessary to protect public health with an adequate margin of safety.

2. **Inhalation Risk Assessment (IRA):** The DEP's review of the Project's IRA confirmed that potential cancer and non-cancer risks from all hazardous air pollutants are **below the DEP's protective health benchmarks**.

This demonstrates that the Project's *direct* impacts on the health and safety of Pennsylvanians are within the limits established by law to be protective.

The commenter suggests the DEP must apply a "strict scrutiny" test to determine if the Project is a "compelling state interest" and "narrowly tailored". The APCA does not require the DEP to make a determination on what constitutes a "compelling state

interest." However, the APCA *does* require analyses that are analogous to the "narrowly tailored" concept:

1. **Alternatives Analysis:** As required by the Nonattainment New Source Review (NNSR) rules (25 Pa. Code § 127.205(5)), Homer City *did* perform an analysis of alternatives, including renewable energy. This analysis, which the DEP reviewed and approved, concluded that solar and wind were not viable for the Project's stated purpose of providing 4,678 MWe of dispatchable (on-demand) power, citing their intermittent nature and the vastly larger land-use requirements (e.g., 13,380 acres for solar).

2. **BACT Analysis:** For greenhouse gas emissions, the "narrowly tailored" analysis is the **Best Available Control Technology (BACT)** review. As detailed in the Application and our response to Comment 87, Section I, this review evaluated lower-emission technologies (like CCS) and found them technically infeasible. The resulting BACT limit of **800 lbs. CO2e/MWh** represents the most stringent "tailored" emission limit that is achievable for this facility.

The DEP's review is not based on the "strict scrutiny" test as framed by the commenter, but on the specific, mandated technical reviews under the APCA (NAAQS, IRA, BACT, and Alternatives Analysis). The Project has demonstrated compliance with all of these legal standards. Therefore, the DEP has fulfilled its statutory and constitutional duties to protect public health and the environment.

Comment: *The ERA Requires that DEP Conduct an Environmental Impact Review of the Project that Evaluates the Project's Contribution to Climate Change Impacts in Pennsylvania.*

Response: The DEP agrees that Article I, Section 27 (ERA) requires the agency to "consider the environmental effects of its permitting action before proceeding to grant a permit". The DEP fulfills this constitutional obligation through the technical review processes mandated by the Air Pollution Control Act (APCA) and 25 Pa. Code Chapter 127.

This existing, legally mandated framework *is* the "environmental impact review" for air quality permits. This comprehensive review, documented in the DEP's Technical Review Memo and supporting technical summaries, is the mechanism by which the DEP evaluates a Project's potential for "unreasonable degradation".

The DEP's review *did* evaluate the Project's "contribution to climate change impacts", as required by the federal Prevention of Significant Deterioration (PSD) program. This review, detailed in the Application and our response to Comment 89, Section I, required a "top-down" **Best Available Control Technology (BACT)** analysis for all greenhouse gases (GHGs). This BACT review ensures emissions are minimized to the maximum extent technically achievable and includes:

- A limit for **Carbon Dioxide (CO2)** based on the use of highly efficient turbines, after determining Carbon Capture (CCS) to be technically infeasible at this time [5].

- A **Methane (CH4)** leak detection and repair (LDAR) program for fugitive gas components.
- A BACT limit for **Sulfur Hexafluoride (SF6)** leaks from circuit breakers.

Furthermore, the DEP's review evaluated all *local* environmental health effects. Our review of the **Air Quality Impact Analysis** confirmed the Project **will not cause or contribute to a violation** of the health-based National Ambient Air Quality Standards (NAAQS). Our review of the **Inhalation Risk Assessment** confirmed all risks are **below the DEP's protective health benchmarks**.

The DEP disagrees with the assertion that the agency is "estopped from finding the Project will not unreasonably degrade... the environment". The DEP's determination is that a Project which meets all applicable, health-protective standards (NAAQS, IRA) and minimizes emissions to the maximum extent technically achievable (BACT, LAER) does *not* constitute an "unreasonable degradation." The DEP has conducted the required "thorough and science-based analysis" and determined that the Project, as conditioned in this Plan Approval, is compliant with all applicable laws and the agency's constitutional obligations.

M. Miscellaneous.

Commenter: *Construction of the Facility Prior to a Plan Approval is Unlawful.* Commenter 78.

Response: The Pennsylvania Air Pollution Control Act and its implementing regulations are clear and unambiguous on this matter. 25 Pa. Code § 127.11(a) states: "Except as provided in § 127.14 (relating to exemptions), a person may not cause, suffer or permit the construction, modification or reactivation of an air contamination source... unless the Department has issued a plan approval for the construction, modification or reactivation." The federal guidance letter referenced by the commenter (the "MCAQD Letter") does not supersede the DEP's authority to implement and enforce the Commonwealth's approved pre-construction permitting requirements. The permittee is not authorized to "begin actual construction" on any part of this Project until and unless this Plan Approval is finalized and formally issued.

IV. Final Determination

Pursuant to 25 Pa Code Chapter 127, the comments submitted during the public comment period have been reviewed and are appropriately addressed in this document. The DEP appreciates the many thoughtful comments, which covered a wide variety of aspects related to the proposed Homer City Generating Station Project. The DEP hopes the above information addresses the commenter's concerns. The DEP appreciates the commenter's efforts in preserving and protecting our environment and the residents of our Commonwealth.

After consideration of all comments received and revisions to the proposed Plan Approval, DEP has determined that, based on the available information, Homer City's proposed construction of a natural gas-fired electric generation plant and associated control devices at the facility, located in Center Township, Indiana County can meet the emission limitations and the conditions set forth in the Plan Approval and will comply with all applicable State and Federal air quality regulatory requirements. Therefore, DEP is issuing the Plan Approval (No. 32-00457A) as of the date of this Comment Response Document, November 18, 2025. The expiration date of the Plan Approval is May 31, 2027. Homer City is required to demonstrate to the DEP's satisfaction that emissions from the sources constructed comply with all applicable DEP Rules and Regulations and conform to the operational information stated in the Application. Upon evaluation of the compliance information, DEP will consider issuing an operating permit.