

Methane Challenge Best Management Practice Reporting Form

OMB Control No. 2060-0722  
Approval expires 10/03/202X  
EPA Form No. 5900-434

This reporting form must be downloaded from the Methane Challenge module in e-GGRT. All data on this page will automatically populate based on data entered in e-GGRT.

Note that if you have committed to a source, but that source is not present at this facility, check the box in column F to indicate this.

Participating sources are automatically populated based on the most recent commitment information EPA has received from your company. If these commitments are not accurate, please contact the Help Desk (GHGreporting@epa.gov).

If other data on this tab are incorrect, you can fix the data in e-GGRT and redownload this form. If you need help locating the data in e-GGRT, please contact the Help Desk (GHGreporting@epa.gov)

After completing this Facility Info tab, please fill out the tab(s) corresponding to the sources on which this facility is reporting.

Note that you will need to submit a separate report for each of your facilities.

Last Updated: 3/31/2021  
Version: ICR RENEWAL 2021

Report Year: 20XX

Partner Name: SAMPLE PARTNER

Facility Name: SAMPLE FACILITY

This is a preview version of the reporting form only. The Methane Challenge Reporting System will not accept reports submitted on this version of the reporting form. Partners should always download their facility-specific reporting forms directly from the Reporting System.

Industry Segment

<input type="checkbox"/>	Onshore Production
<input type="checkbox"/>	Drilling and Boosting
<input type="checkbox"/>	Natural Gas Processing
<input type="checkbox"/>	Transmission and Storage
<input type="checkbox"/>	Distribution

A check below indicates that the Partner has made a commitment to the source. If this source does not exist at this facility, please check this box

Participating Sources					
<input type="checkbox"/>	Shutdowns				
<input type="checkbox"/>	Welds- Cast Iron and Unprotected Steel				
<input type="checkbox"/>	Services- Cast Iron and Unprotected Steel				
<input type="checkbox"/>	Excavation Damages				
<input type="checkbox"/>	Reciprocating Compressors - Rod Packing Vent				
<input type="checkbox"/>	Centrifugal Compressors - Venting				
<input type="checkbox"/>	: Controllers				
<input type="checkbox"/>	if Atmospheric Pressure Hydrocarbon Liquid Storage Tanks				
<input type="checkbox"/>	it Leaks (Compressor Isolation and Blowdown Valves)				
<input type="checkbox"/>	Renewable Natural Gas				

Methane Challenge Partner ID Number: Methane Challenge Partner IDs are automatically assigned to partners by the e-GGRT system

Methane Challenge Facility ID Number: Methane Challenge Facility IDs are automatically assigned to partners by the e-GGRT system

GHGRP ID Number: 123456 <- This field will populate with a GHGRP facility ID if you indicated that this Methane Challenge facility reports to Subpart W of the Greenhouse Gas Reporting Program during Methane Challenge Facility Registration. If this Methane Challenge facility does not report to Subpart W, this field will be blank. If you need help updating your facility information, please contact the Help Desk.  
  
If this facility reports to Subpart W, on subsequent tabs, fields shaded in grey represent data elements that are reported to GHGRP; these fields will be pre-populated with data submitted to GHGRP. Therefore, when completing these forms, those fields will be locked to prevent changes and you may skip fields that are shaded in grey. Please note that this form will not update Subpart W data in e-GGRT.

Reporting Year: Pre-populated using certified Part 98 Subpart W annual report.  
Version:  
Date Certified:

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Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

[For additional information about the data being requested, and for further detail on quantification methodologies, please refer to the "BMP Commitment Option Technical Doc](#)

Partner Name	Facility Name	Report Year
SAMPLE PARTNER	SAMPLE FACILITY	20XX

**Distribution Pipeline Blowdowns**

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**Table 1. Distribution Pipeline Blowdowns**

Number of blowdowns	
Total CH <sub>4</sub> emissions (mt CH <sub>4</sub> )	

**Table 2. Voluntary Actions Taken to Reduce Methane Emissions During Reporting Year**

Number of blowdowns that routed gas to:	
Compressor or capture system for beneficial use	
Flare	
Low-pressure system	
Number of hot taps utilized that avoided the need to blowdown gas to the atmosphere	
Total potential emissions (mt CH <sub>4</sub> )	
Emission reductions from voluntary action (mt CH <sub>4</sub> )	

**Additional Information**

This space provides an opportunity for reporting optional, qualitative information that was not covered in the above data elements which communicates progress on the applicable commitment.

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<b>Partner Name</b>	<b>Facility Name</b>	<b>Report Year</b>
SAMPLE PARTNER	SAMPLE FACILITY	20XX

**Transmission Pipeline Blowdowns between Compressor Stations<sup>1</sup>**

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**Table 1. Transmission Pipeline Blowdowns between Compressor Stations**

Quantification Method	Equipment or event type	Total number of blowdowns	Total CH <sub>4</sub> emissions (mt CH <sub>4</sub> )
Subpart W Method 1, based on volume, temperature, and pressure	Pipeline integrity work (e.g., the preparation work of modifying facilities, ongoing assessments, maintenance or mitigation)		
	Traditional operations or pipeline maintenance		
	Equipment replacement or repair (e.g., valves)		
	Pipe abandonment		
	New construction or modification of pipelines including commissioning and change of service		
	Operational precaution during activities (e.g. excavation near pipelines)		
	All other pipeline segments with a physical volume greater than or equal to 50 cubic feet		
Subpart W Method 2, based on measurement	Calculated using flow meter		
Alternate calculation method for facilities not reporting to Subpart W only			

**Table 2. Voluntary Actions Taken to Reduce Methane Emissions in During Reporting Year**

Total number of blowdowns to which a BMP was applied	
Number of blowdowns that routed gas to:	
Compressor or capture system for beneficial use	
Flare	
Low-pressure system	
Number of hot taps utilized that avoided the need to blowdown gas to the atmosphere	
Total potential emissions (mt CH <sub>4</sub> )	
Emission reductions from voluntary action (mt CH <sub>4</sub> ) <sup>2</sup>	

**Additional Information**

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<sup>1</sup> This source is intended to align with Subpart W's 'Onshore Natural Gas Transmission Pipeline Segment,' capturing all blowdowns not occurring at compressor stations. In Subpart W, this activity is reported on tab (i) Blowdown Vent Stacks.

<sup>2</sup> Difference in potential and actual emissions as calculated per the specified emission quantification methodologies for each source.

Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

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Partner Name	Facility Name	Report Year
SAMPLE PARTNER	SAMPLE FACILITY	20XX

**Distribution Mains - Cast Iron and Unprotected Steel<sup>1</sup>**

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**Table 1. Distribution Mains - Cast Iron and Unprotected Steel Initial Inventory**

Initial inventory of cast iron distribution mains as of January 1 of the first year of current commitment (miles)	
Initial inventory of unprotected steel distribution mains as of January 1 of the first year of current commitment (miles)	

**Table 2. Distribution Mains - Mileage and Emissions**

	Total miles of distribution mains	Annual CH <sub>4</sub> emissions (mt CH <sub>4</sub> )
Distribution Mains, Gas Service - Unprotected Steel		
Distribution Mains, Gas Service - Protected Steel		
Distribution Mains, Gas Service - Plastic		
Distribution Mains, Gas Service - Cast Iron		
Distribution Mains, Gas Service - Reconditioned Cast Iron (with cured-in-place liners)		
Distribution Mains, Gas Service - Unprotected Steel with cured-in-place liners		

[See Table W-7 to Subpart W of Part 98 - Default A](#)

**Table 3. Voluntary Actions Taken to Reduce Methane Emissions During Reporting Year**

Miles of cast iron mains:	
Replaced with plastic	
Replaced with protected steel	
Rehabilitated with cured-in-place liners	
Retired without replacement	
Miles of unprotected steel mains:	
Cathodically protected or replaced with protected steel	
Replaced with plastic	
Rehabilitated with cured-in-place liners	
Retired without replacement	
Emission reductions from voluntary action (mt CH <sub>4</sub> )	

*This cell will automatically calculate emissions reductions.*

**Additional Information**

This space provides an opportunity for reporting optional, qualitative information that was not covered in the above data elements which communicates progress on the applicable commitment.

<sup>1</sup> In Subpart W, this activity is reported on tab (q,r) Equipment Leaks.

Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

For additional information about the data being requested, and for further detail on quantification methodologies, please refer to the "BMP Commitment Option Techni

Partner Name	Facility Name	Report Year
SAMPLE PARTNER	SAMPLE FACILITY	20XX

**Distribution Services - Cast Iron and Unprotected Steel<sup>1</sup>**

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**Table 1. Distribution Services - Cast Iron and Unprotected Steel Initial Inventory**

Initial inventory of cast iron services as of January 1 of the first year of current commitment (count)	
Initial inventory of unprotected steel services as of January 1 of the first year of current commitment (count)	

**Table 2. Distribution Services - Counts and Emissions**

	Total number of services	Annual CH <sub>4</sub> emissions (mt CH <sub>4</sub> )
Distribution Services, Gas Service - Unprotected Steel		
Distribution Services, Gas Service - Protected Steel		
Distribution Services, Gas Service - Plastic		
Distribution Services, Gas Service - Copper		
Distribution Services, Gas Service - Cast Iron		
Distribution Services, Gas Service - Reconditioned Cast Iron (with Plastic Liners)		
Distribution Services, Gas Service - Unprotected Steel with Plastic Liners		

[See Table W-7 to Subpart W of Part 98 - Default Me](#)

**Table 3. Voluntary Actions Taken to Reduce Methane Emissions During Reporting Year**

Number of cast iron services:	
Replaced with plastic	
Replaced with protected steel	
Replaced with copper	
Reconditioned with cured-in-place liners	
Retired without replacement	
Number of unprotected steel services:	
Cathodically protected or replaced with protected steel	
Replaced with plastic	
Replaced with copper	
Rehabilitated with cured-in-place liners	
Retired without replacement	
Emission reductions from voluntary action (mt CH <sub>4</sub> )	

*This cell will automatically calculate emissions reductions.*

**Additional Information**

This space provides an opportunity for reporting optional, qualitative information that was not covered in the above data elements which communicates progress on the applicable commitment.

<sup>1</sup>In Subpart W, this activity is reported on tab (q,r) Equipment Leaks.

Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

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Partner Name	Facility Name	Report Year
SAMPLE PARTNER	SAMPLE FACILITY	20XX

**Distribution Excavation Damages** [Return to Facility Info](#)

**Table 1. Distribution Excavation Damages - Total Counts**

Excavation damages during reporting year	Total number of excavation damages	
	Total number of excavation damages per thousand locate calls	
	Total number of excavation damages which resulted in a release of natural gas	
	Total number of excavation damages which resulted in the pipeline being shut down	
	Total number of excavation damages where the operator was given prior notification of excavation activity	

**Table 2. Distribution Excavation Damages - Counts by Class Location (Optional)**

	Class 1	Class 2	Class 3	Class 4
Total number of excavation damages per class location (optional, if data is available)				

**Table 3. Distribution Excavation Damages - Counts by Pipe Material and Part of System**

		Main	Service	Inside Meter/Regulator Set	Other
Total number of excavation damages by pipe material and part of system involved	Steel				
	Cast Iron				
	Copper				
	Plastic				
	Other				

**Table 4. Distribution Excavation Damages - Counts by Type that Caused Excavation Damage**

Total number of excavation damages by type that caused excavation damage incidents	Contractor	
	Railroad	
	County	
	State	
	Developer	
	Farmer	
	Utility	
	Municipality	
	Occupant	
	Unknown/Other	

**Table 5. Distribution Excavation Damages - Counts by Apparent Root Cause**

Total number of excavation damages by apparent root cause	One-Call Notification Practices Not Sufficient	
	Locating Practices Not Sufficient	
	Excavation Practices Not Sufficient	
	One-Call Notification Center Error	
	Abandoned Facility	
	Deteriorated Facility	
	Previous Damage	
	Other/Miscellaneous	

**Table 6. Voluntary Actions Taken to Reduce Methane Emissions During Reporting Year**

Actions taken to minimize excavation damages/reduce methane emissions from excavation damages	
Company-specific goal for reducing excavation damages and/or methane emissions from excavation damages (when available)	
Progress in meeting company-specific goal (when available)	

**Additional Information**

This space provides an opportunity for reporting optional, qualitative information that was not covered in the above data elements which communicates progress on the applicable commitment.









Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

[For additional information about the data being requested, and for further detail on quantification methodologies, please refer to the "BMP Commitment Option Technical Document" doc](#)

Partner Name	Facility Name	Report Year
SAMPLE PARTNER	SAMPLE FACILITY	20XX

**Production, Gathering and Boosting, and Transmission and Storage Natural Gas Continuous Bleed Pneumatic Controllers<sup>1</sup>**

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**Table 1. Production, Gathering and Boosting, and Transmission and Storage Continuous Bleed Natural Gas Pneumatic Controllers**

Type of Pneumatic Device	Total Number	Average operating hours per controller (hr/yr)	Total CH <sub>4</sub> Emissions (mt CH <sub>4</sub> )
High-bleed pneumatic controllers (greater than 6 scf per hour)			
Low-bleed pneumatic controllers (less than or equal to 6 scf per hour)			

*For Production and Gathering & Boosting facilities in the first two years of reporting, total number of pneumatic devices should be the sum of actual and estimated counts.*

**Table 2. Production, Gathering and Boosting, and Transmission and Storage Continuous Bleed Natural Gas Pneumatic Controllers - Operational Exemptions**

Number of high-bleed controllers claiming operational exemptions	
Rationale for operational exemption	

**Table 3. Voluntary Actions Taken to Reduce Methane Emissions During Reporting Year**

Number of high-bleed controllers converted to low-bleed	
Number of high-bleed controllers converted to zero emitting or removed from service	
Number of low bleed controllers converted to zero emitting or removed from service	
Number of intermittent-bleed controllers converted to zero emitting or removed from service	
If converting or removing intermittent-bleed controllers, mitigation technology(ies) used	
Emission reductions from voluntary action (mt CH <sub>4</sub> )	

**Additional Information**

This space provides an opportunity for reporting optional, qualitative information that was not covered in the above data elements which communicates progress on the applicable commitment.

<sup>1</sup> In Subpart W, this activity is reported on tab (b) NG Pneumatic Device.







Emission reductions from voluntary action (mt CH4)

### **Additional Information**

This space provides an opportunity for reporting optional, qualitative information that complements the above data elements which communicates progress on the application.



<sup>1</sup>In Subpart W, this activity is reported on tab (j) Atmospheric Storage











Information that was not covered in  
available commitment.



*Tanks.*





















Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

For additional information about the data being requested, please refer to the "BMP Commitment Option Technical Document" document found on the Methane Challenge

Partner Name	Facility Name	Report Year
SAMPLE PARTNER	SAMPLE FACILITY	20XX

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**Renewable Natural Gas**

**Table 1. General Information**

	Investing in biogas projects	Directly interconnecting with biogas project	Delivering RNG to end users	Supplying RNG to end users	Purchasing environmental attributes for RNG that is physically connected to the company's system	Purchasing environmental attributes for RNG that is not physically connected to the company's system
What role(s) does your company play in the RNG process?						
Does your company offer a 'green gas' option to residential customers?						

**Table 2. Information About the Biogas Source**

Biogas Project ID	What is the feedstock for the biogas?	Specify "Other" Feedstock	Name the specific municipal solid waste landfill or digester from which the RNG was generated	What upgrading technology was used?

**Table 3. Information About the Pipeline Interconnect(s)**

Type of interconnect	If interconnect with natural gas company		If interconnect with biogas project:						
	Name of interconnecting company	Biogas Project ID	Location of the interconnect (latitude)	Location of the interconnect (longitude)	Volume of gas received this year (scf gas)	Reference to the company's gas quality standards that are applicable to this project (e.g., pipeline tariff)	How far is the interconnect from the feedstock source (km)?	Is there a virtual pipeline?	If yes, details about the virtual pipeline

**Table 4. Information about the end use(s) and environmental attributes**

Biogas Project ID (if known)	What is the designated market for the RNG (region/city/state/facility) [if known]?	What is the designated end use?	Specify "Other" end use	Volume of RNG going to this end use, this year (scf gas) [if known]	Does your company currently own the environmental attributes for the RNG?	If your company does not own the environmental attributes now, who does? [if known]	If your company does, or at one point did, own the attributes for RNG, does your supply contract for "renewable" natural gas include conveyance of environmental attributes to your company (e.g., by way of a contract clause, attestation)?	If your company is selling "renewable" natural gas supply to another downstream entity (e.g., distributor, end consumer etc.), have you contractually conveyed the RNG environmental attributes to the downstream buyer?	Is your company using a third party provider to certify or track attributes? If so, which one(s)?

**Table 5. Information about the Partner's strategy for supply of "low carbon fuels"**

Company-specific goals or strategies for supply of "low carbon fuels" (such as upgraded biogas, hydrogen, etc.) (e.g., percent of natural gas supply to be RNG by a certain year; convert vehicle fleet to run on natural gas and use RNG for fuel, if applicable)	
Is your company blending hydrogen into its natural gas supply?	
At what rate will you be blending (% hydrogen by volume)	
What is the source and/or feedstock of the hydrogen? (e.g., renewable/nuclear/etc.)	
Is any upgrading/cleaning of the hydrogen required before injection?	
What pipeline types does your company inject hydrogen into (material and pressure)?	
Have you done any related customer engagement?	
Has anything been done to customer appliances (if yes, what)?	

**Additional information**

This space provides an opportunity for reporting optional, qualitative information that was not covered in the above data elements.

Additional information on the role(s) your company plays in the RNG process or 'green gas' offerings	
Additional information on the biogas project(s)/ upgrading process(es)	
Additional information on the interconnect process	
Additional information on the end use(s)	
Additional information about environmental attributes	

Partners may provide information on technologies/practices/approaches currently included in the program. This information may be provided and please upload it with your BMP form(s) in e-GGRT.

[For additional information about the data being requested, please refer](#)

**Partner Name**

SAMPLE PARTNER

**Innovative Technologies, Practices, and Approach**  
***BEFORE SUBMITTING INFORMATION UNDER THIS***

<b>Applicable emission source(s)</b>
<b>Applicable industry segments</b>
<b>Name of technology/practice(s) to mitigate emissions from that source</b>
<b>Scope of implementation</b>

**Confirmation the technology/practice is covered by regulation (federal, state, local)**

**A description of the technology/practice(s)**

**Description of how widely available technology is**

**Description of any technical infeasibilities/issues that need to be addressed**

**Estimated range of emission reductions achievable and methodology used to develop the estimate**

**Assessment of cost-effectiveness**

**Data elements needed to monitor progress in reducing methane emissions**

**Any other information needed to fully understand the technology/practice/approach**

ies to mitigate emissions from existing emission sources in the program, or for emission sources not  
on this form, or as a standalone Word document/PDF. If using a Microsoft Word document or PDF,

[er to the "BMP Commitment Option Technical Document" document found on the Methane Challenge w](#)

**Facility Name**

**Report Year**

SAMPLE FACILITY

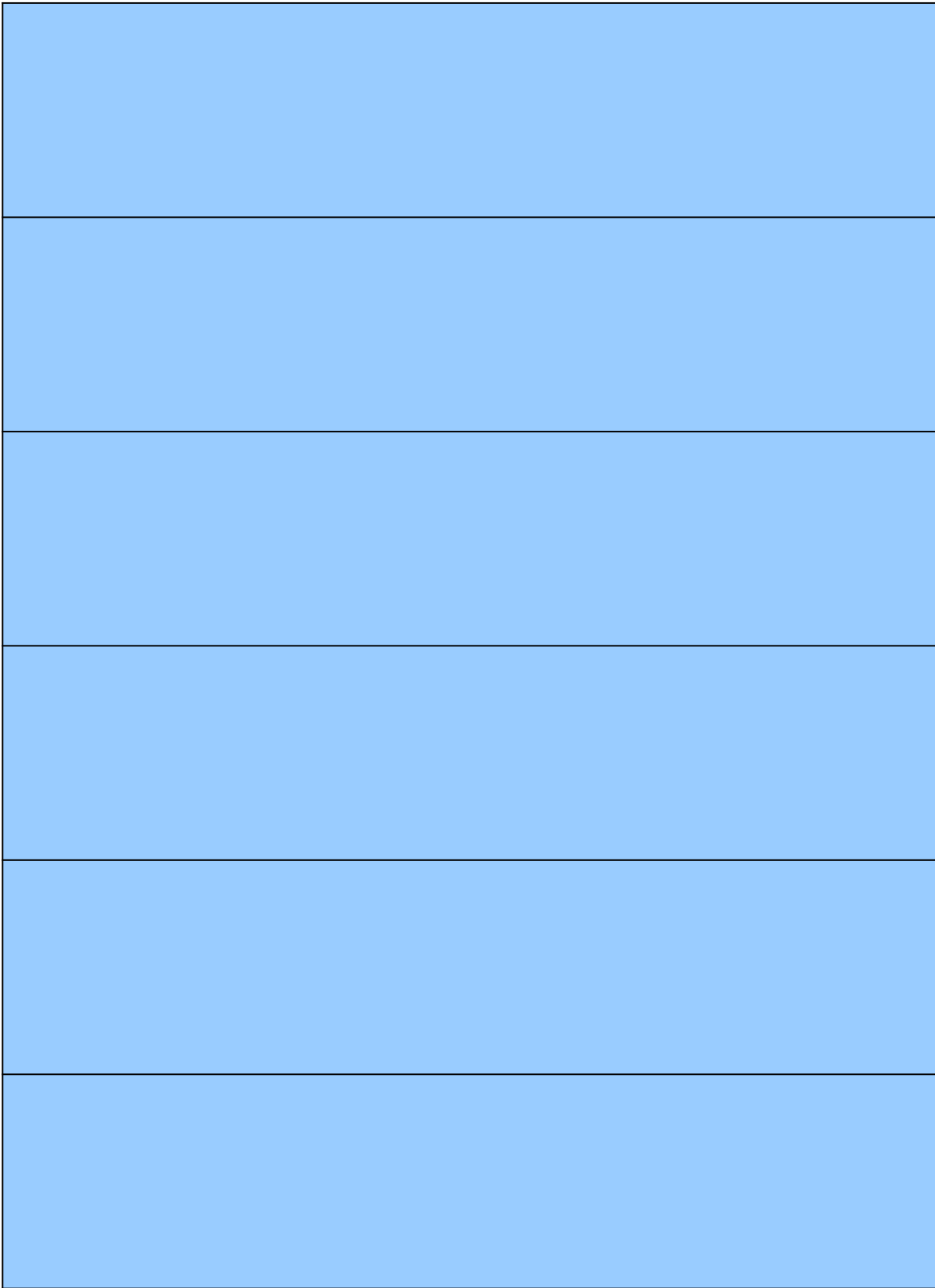
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**MECHANISM, PLEASE EMAIL GASSTAR@EPA.GOV FOR APPROVAL OF TH**





*THE TOPIC*