

Community Benefits Plan

DE-FOA-0003109, Inflation Reduction Act (IRA) – Mitigating Emissions from Marginal Conventional Wells

Pennsylvania Department of Environmental Protection

Purpose

This document details specific objectives the Pennsylvania Department of Environmental Protection's (DEP) Office of Oil and Gas Program and Planning Management (OOGPPM) commits to as a Community Benefits Plan (CBP), doing so in quantifiable terms with SMART milestones to address the issue of methane emissions of marginally producing conventional wells (MCWs) across the Commonwealth of Pennsylvania. Article I, Section 27 of the Constitution of the Commonwealth of Pennsylvania provides: "The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment."¹ By plugging these MCWs, environmental and public health across Pennsylvania benefits through the mitigation of errant emissions from methane into our air and water. Partnering with the Department of Energy (DOE) and the National Energy Technical Laboratory (NETL), as well as, various stakeholders, organizations, workforce development groups, and local and state government agencies, DEP and OOGPPM aim to address this legacy pollution which affects the Commonwealth and its citizens.

A - General Project Information

1. Construction Information

(per Location(s) of work document – To be Updated as established)

- a. any known construction labor risks or threats that could cause delays to the schedule:
- b. potential public and worker health and safety risks and hazards:
- c. known possibilities of labor disruption:
- d. plans for coordination among various employers (i.e., prime contractors and subcontractors):
- e. plans for resolution mechanism to avoid potential project delays (including issues that may arise among contractors and subcontractors as well as employees):
- f. the general contractor or Engineering, Procurement, and Construction contractor, if known:
- g. the primary business of the general contractor or EPC contractor:

¹ [The Constitution of Pennsylvania - PA General Assembly \(state.pa.us\)](https://www.constitution.pa.gov/)

2. Locations and Communities Affected

(per Location(s) of work document – To be Updated as established)

B – Community and Labor Engagement

DEP recognizes the integral role that all partners involved in this project contribute towards the success of implementing impactful job training throughout the Commonwealth. DEP and OOGPPM will foster an effective workforce with multiple focuses toward monitoring, measuring (in accordance with DOE methane measurement guidelines for MCWs), repairing, and mitigating methane emissions from MCWs. DEP will cooperate with Local Workforce Development Boards (LWDB) and various non-governmental organization (NGO) workforce entities, as well as State and Local agencies and community-based organizations (CBO) to provide career pathways, involve and engage the communities impacted, receive feedback from to communities, and enhance job opportunities in the transitioning energy economy, all while bolstering disadvantaged communities (DACs) and other communities in need.

DEP will partner with other Commonwealth agencies including the Pennsylvania Departments of Labor and Industry (L&I), Education (PDE), Community and Economic Development (DCED), and organs within DEP, including the Office of Environmental Justice (OEJ), and Bureau of Air Quality, cooperating toward the goal of emboldening educational and workforce development and opportunity throughout the Commonwealth.

Through DEP partnership with the Department of Labor and Industry (L&I), DEP has been able to leverage the federal and state workforce system in Pennsylvania. Through L&I's Service Delivery Partnership Calls, we will have the ability to collaborate with Pennsylvania's state and local workforce development boards. These meetings will allow us to identify stakeholder groups, state agencies, and community partnerships. These partners will provide input on all aspects of program design and operation to ensure that the specific needs of the target population are met. Additionally, this type of collaboration will maximize DEP's ability to achieve positive outcomes for the individuals served through this grant by ensuring their occupational proficiencies to acquire and maintain employment and the supportive services they may need. Through DEP grant opportunities, we will require that all new grantees notify their local workforce development boards and inform them of their proposed project. This requirement will allow a deeper connection between local employers and their respective local workforce development boards and PA CareerLink® Business Service Teams.

Local workforce development boards designate operators for the PA CareerLink® offices (PA's one-stop service centers), the primary engagement site for individuals looking for all employment services. PA CareerLink® offices include partners that assist with case management, supportive services, adult training, adult education, and family literacy. The PA CareerLink® system also includes a user-friendly premiere job-matching system created to help bridge the gap that currently exist between job seekers and employers. In PA CareerLink®, jobseekers have the ability to search and apply for job openings across the Commonwealth or

narrow it down to their own town. For employers, it is easy to search the talent pool in PA CareerLink® by simply creating a job posting and connecting with candidates for free. DEP will leverage this resource and require our grantee(s) to register available positions on Pennsylvania's Commonwealth Workforce Development System (CWDS), increasing the employer and job-seeker database.

As described in *Green Stimulus for Oil and Gas Workers: Considering a Major Federal Effort to Plug Orphaned and Abandoned Wells*, approximately 120,000 jobs could be created addressing the plugging needs of 500,000 wells.² This program can create pathways for new career opportunities as federal funding becomes more readily available. The technical talent and experience of a workforce necessary to drill and operate wells is of a compatible skill set needed to best remediate them. Therefore, part of DEP's approach in this project reframes that practical knowledge into a new application, remediation in place of extraction. In planning this project, DEP has broadened its understanding of how best to facilitate the growth of these opportunities and how they align with the focus of the project, the needs of the affected communities, and the goal of addressing these environmental and health issues.

In scope and duration, the project's benefits will take shape over a wide array of real-world impacts, and over a several-year period. Future work and project development enables continued results for the Commonwealth as a whole. Collaboration with LWDBs benefits the needs of job seekers, workers, training providers, and employers in areas of direct service to DACs and historically disenfranchised populations.

One of the SMART goals for this project is the development and maintenance of a public facing website detailing the work proposed and accomplished by this project: to track and report on the benefits to and for affected communities, to provide updates on progress of ongoing and planned work in areas with DACs, to keep updates towards environmental restoration efforts around planned and completed work, and to take clear inventory of the pre and post methane emission reductions, as determined by DOE measurement guidelines, achieved by the work done.

This section will be continually updated as work location(s) and work plans are established.

1. Community and Labor Stakeholders Engaged to Date

Name of Organization or Community of Interest Engaged:

Type of Engagement:

Date of Engagement:

Outcome of Engagement:

² Raimi, Nerurkar, Bordroff. 2020. *Green Stimulus for Oil and Gas Workers: Considering a major federal effort to plug orphaned and abandoned wells*. <https://www.energypolicy.columbia.edu/publications/green-stimulus-oil-and-gas-workers-considering-major-federal-effort-plug-orphaned-and-abandoned>

This section will be continually updated as work plans are established.

2. Community and Labor Stakeholders to be Engaged

Name of Organization or Community of Interest Engaged:

Type of Engagement:

Frequency of Engagement:

Intended Outcome of Engagement:

This section will be continually updated as work plans are established.

3. Workforce and Community Agreements

Agreements with labor unions and additional trade associations is something outside the scope of this project but working with those organizations on career mapping once this project is underway will be valuable as other federal funding opportunities become available.

4. Other Community and Labor Engagement Goals, Commitments, and Milestones

This section will be continually updated as work plans are established.

C – Investing in Job Quality and a Skilled Workforce

DEP aims to bolster and grow a dedicated and reliable workforce, capable of handling the energy needs of the Commonwealth as federal funding opportunities provide for remediation of legacy pollution, including methane emission. During the first year of the pandemic (Q4 2019 – Q4 2020), Pennsylvania’s clean energy sector shed roughly 7,200 workers, representing roughly 2% of total jobs lost, contrasted with a 5.1% increase in the clean energy industry of approximately 4,613 jobs recovered in the period following (between Q4 2020 and Q4 2021).³

Investment towards job creation for workers looking to take part in an expanding workforce of the clean energy economy is a priority for DEP and the Commonwealth of Pennsylvania more generally. Pennsylvania introduced a first-in-the-Nation “Commonwealth Workforce Transformation Program” (CWTP). Allocating up \$400 million toward workforce development on clean energy projects, the CWTP reimburses eligible organizations up to \$40,000 per new employee, up to 10 new employees per clean energy project, who complete approved on-the-job or Registered Apprenticeship programs. The CWTP addresses tightness of the labor market, creates clean energy employment opportunities, and reduces project backlog. It creates a

³ Pennsylvania Department of Environmental Protection, Office of Energy and Technology. 2022. Pennsylvania Clean Energy Employment Report. https://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/2022_Energy_Report/2022_PA_CEER_3.4vw.pdf

centralized Commonwealth entity that works with subgrantees to meet requirements by directly tying Registered Apprenticeships, pre-apprenticeships, and on-the-job training programs to project work pursuant to a CWTP award. The CWTP creates opportunities for good jobs by not only requiring compliance with PA Prevailing Wage statutes and the Davis Bacon Act, but by assisting eligible organizations with achieving these employment standards.

Transferability of job skills from declining jobs, implicated in this project, facilitates DEP's remediation of legacy issues that have a direct negative consequence for environmental and health concerns throughout the Commonwealth. DEP and OOGPPM look to work with partners throughout the oil and gas industry to address legacy well pollution. With this DOE funded opportunity, DEP and OOGPPM intend to bring more operators and contractors of MCWs into the fold of addressing these well plugging opportunities as continuations of their career trajectory.

More operators remediating MCWs represents the retention of individuals who would otherwise be skilled job seekers and workers with underleveraged talent. DEP and OOGPPM believe this opportunity incentivizes responsible well plugging through addressing errant methane emissions detrimental to communities and populations throughout the Commonwealth. This is a net win for the environment, public health, industry, and workforce alike.

Another SMART goal for this proposal includes an assessment of identified marginal conventional wells methane emissions due to leaking and/or mechanical integrity issues, age, violations. Compilation of dataset(s) encompassing target wells with impacts to local communities and populations, also to be used as pre-plugging datapoint in relation to project end goal(s). Consolidating potential LWDBs, NGOs, state agencies and local government, stakeholder and local input and involvement aimed at collection of data and data sharing, as well as subsequent action plans to address MCWs.

A further set of SMART goals for the project involves the evaluation of assessment method effectiveness and field surveying out reliable workplans to address identified MCWs, with potential utilization of established NETL field practices for monitoring and onsite well assessment(s), including possible tests involving ambient air/fenceline monitoring, drone methane surveys, ground-based methane surveys, direct source emission measurements, optical gas imaging, and more. Finally, the gathering and organization of pre and post plugging methane measurements and providing data sharing on emission reductions impacts resultant from work accomplished by the proposal, as well as agreements with stakeholders, NGOs, and assorted local and state agency partners being finalized and agreed to.

1. Collective bargaining

Agreements with labor unions and additional trade associations is something outside the scope of this project but working with those organizations on career mapping once this project is underway will be valuable as other federal funding opportunities become

available. This career mapping process is implicit in CWTP education and certification expectations.

D – Diversity, Equity, Inclusion, and Accessibility (DEIA)

With the DOE funding made available by this proposal, DEP and OOGPPM will address MCWs throughout the Commonwealth that have a reported adverse levels of methane emission leaks. DEP and OOGPPM intend to address this environmental and health concern affecting Pennsylvania DACs, as well as make efforts to support increasing job equity in the growing field of green energy and interfacing with our legacy pollution issues going forward. Utilizing the CEJST mapping tool to identify DACs, DEP and OOGPPM approach this proposal with a focus towards addressing issues that benefit and emphasize job, environmental, and health equity. Mitigating methane emissions is an across the board win for all Commonwealth citizens, making the clear effort to prioritize DACs which suffer from low-income, increased climate change challenges, and general health hazards resultant from legacy pollution, this proposal directly addresses these needs and incorporates local buy in of workforce parity, local government and agency collaboration, and promotes accessibility towards environmental restoration, which in turn leads to increased health benefits, be it from diminished air pollutants and/or water quality pollution as a result of MCWs having gone unplugged while emitting errant methane. In the study *Scientific assessment of background ozone over the U.S.: implications for air quality management*, it is found that methane emissions contribute to ozone formation, and during oil and gas extraction, also contribute to volatile organic compound formations, leading to increased public health effects such as: reduced lung function, asthma attacks, asthma development, emergency room visits and hospital admissions, as well as early death from respiratory and cardiovascular causes.⁴ In a related study by the Climate and Clean Air Coalition, *The Global Methane Assessment*, it is stated that a 50% reduction in global methane concentrations would result in dramatically lower ozone concentrations, and lead to 100,000 fewer premature respiratory deaths due to ozone exposure globally.⁵

Furthermore, these benefits also address costs to the state in terms of plugging these wells before they reach state liability levels that in turn pass onto the taxpayer, and according to the PA DCED, an estimated 734 census tracts were deemed as low-income, comprising 61% of the entire eligible pool, and working towards mitigating any undue economic hardships put upon these communities as a result of MCWs that need to be addressed is a tangible, real world effect and impact that can be established by this DOE funded opportunity, and potentially built

⁴ West, J.J., and Fiore, A.M. 2005. Management of tropospheric ozone by reducing methane emissions. Environ. Sci. Technol., 39, 4685 -4691. Global anthropogenic methane emissions are estimated to contribute 5 ppb to annual mean ozone surface concentrations, a meaningful amount for human health. Jaffe et al., 2018. <https://online.ucpress.edu/elementa/article/doi/10.1525/elementa.309/112835/Scientific-assessment-ofbackground-ozone-over-the>

⁵ Climate and Clean Air Coalition. 2022. Global Methane Assessment Report. <https://www.ccacoalition.org/resources/global-methane-assessment-full-report>

on further as future federal funding becomes available, as success is achieved and demonstrated by Pennsylvania, DEP and OOGPPM.

DOE DEIA objectives will also be met through the supportive intention of the CWTP. The CWTP prioritizes categories of potential employees that have not found an open pathway to jobs. By offering the additional subsidies relating to workforce, along with added support from DEP and L&I, the eligible organizations bring new employees onto the work site, who would otherwise face labor market barriers, including those with disabilities, women, returning citizens, opportunity youth, and veterans. New employees must meet one of the following: recently received a high school, trade school, or community college certification/graduation; enrolled in or completed an Apprenticeship or Pre-Apprenticeship program; registered with PA CareerLink; paroled or released from a correctional institution within six months of hire; or received SNAP, WIC, or other cash assistances within six months of hire.

E – Justice40 Initiative

With the adoption and pursuance of this project, DEP will strive to meet the imperative that “investments might be made toward a goal that 40 percent of the overall benefits flow to disadvantaged communities.”⁶ In doing so, DEP will respond to affected Commonwealth citizens in areas of need with increased employment opportunities and improvements of persistent environmental and health concerns resulting from MCWs. Identification of such communities and populations will be assessed by established tools, such as the Climate and Economic Justice Screening Tool (CEJST), allowing for focus towards DACs of benefits from this proposal to alleviate burdens in these communities. This proposal redresses environmental grievances in DACs by mitigating the methane emissions affecting local air and water quality, as well as bolstering career opportunities in these communities and providing an increase towards clean energy jobs, job pipelines and job training for individuals in and around these communities by reaching out and collaborating with workforce development organizations and other NGOs, as well as the local and state governments in and around the areas burdened by the emissions addressed by this project.

DEP’s commitment working towards environmental justice in the Commonwealth is reflected in its environmental justice policy, helping to focus the intra-agency work done by DEP. Emphasizing pro-active community outreach, communication and transparency are foundational pillars for the work DEP intends to accomplish. By implementing enhanced public participation, helping to highlight community environmental burdens, and addressing the cumulative environmental impacts DEP affirms Justice40 tenets as core to this effort. To that end, OEJ will convene community meetings across the area of work within Pennsylvania, documenting the concerns of residents of behalf of DEP and in conjunction with the efforts of OOGPPM.

⁶ [eo-14008-tackling-climate-crisis-home-abroad.pdf \(energy.gov\)](#)

The presence of adverse health outcomes ranging from asthma, respiratory conditions, and cardiovascular disease across and defining many of Pennsylvania's DACs correlatives to legacy pollution within those communities. Therefore, lessening the burden by way of addressing these harmful emissions offers relief for communities already under hardship, and this funding from DOE will allow DEP and OOGPPM to address a burgeoning issue felt across the Commonwealth. As work continues to address and mitigate the emissions and pollution from MCWs, the investment towards these communities and the workforce engagement brought about it by it can help to provide new resilience in terms of economic equity which further engaging public participation in future proposals, projects, and work done throughout the Commonwealth to better environmental and public health issues resultant from legacy pollution issues and environmental restoration efforts in and for the areas most in need.

1. A decrease in environmental exposure and burdens

Benefit E1.1: Reduction of legacy methane pollution affecting rate of climate change

DAC that will benefit: Low-income, legacy pollution

How benefit will be developed: Plugging leaking marginal wells

When benefit will be delivered: Upon successful completion of plugging leaking marginal wells

Milestones toward benefit delivery: Post plugging monitoring and inspection(s)

Metrics to track and report on benefits: Detected methane emissions pre and post

Community-based organization(s) involved in identifying or negotiating benefit or developing plan for benefit delivery: PA DEP OEJ

2. An increase in quality job creation, the clean energy job pipeline, and job training for individuals

Benefit E2.1: Increase in opportunities for clean energy job and career pathways

DAC that will benefit: Low-income, legacy pollution

How benefit will be delivered: Increase via availability of plugging and mitigation efforts throughout project lifetime

When benefit will be delivered: As contractors are funded to begin operations towards plugging and mitigation efforts

Milestones toward benefit delivery: Hiring/training increases correlative with planned plugging operations

Metrics to track and report on benefits: Increase in scheduled, planned, and/or designated plugging operations relevant to MCW methane mitigation efforts

Community-based organization(s) involved in identifying or negotiating benefit or developing plan for benefit delivery: LWDBs, NGOs, state & local agencies

3. Anticipated or potential negative environmental impacts

There will be no direct negative or cumulative environmental impacts as a result of this project. Over time a decrease in environmental exposure to the harmful effects of leaking methane emissions, as well as contributions by said emissions towards the rate of warming, will be diminished, and general health issues from potential leaks affecting air and water quality may be addressed as a result of the work of this project, however quantifying these impacts is beyond the scope of this proposal.

This summary table is being continually updated in reference to ongoing program modifications, timetables, and partnerships

F. Summary Table

Category and Commitment	Budget Period 1 milestone	Budget Period 2 milestone	Budget Period 3 milestone	Budget Period 4 milestone
Community and Labor Engagement				
Stakeholder outreach and engagement	Parties and scope identified	Agreements reached		
Solicit local government input & data sharing	Parties and scope identified	Agreements reached		
Solicit public input & data sharing	Parties and scope identified	Agreements reached		
Solicit stakeholder input & data sharing	Parties and scope identified	Agreements reached		
Creation of website to track community benefit actions	Creation of website and initial data sharing	Maintenance and ongoing tracking of community benefits and measurement data	Maintenance and ongoing tracking of community benefits and measurement data	Evaluation of pre and post measurement data resultant from project
Investing in Job Quality and a Skilled Workforce				
Diversity, Equity, Inclusion, and Accessibility				
	Baseline of affected disadvantaged communities & impacts from methane emissions	Estimated impact of mitigation efforts in relation to baseline data	Assessment of impact to date of mitigation efforts in relation to baseline data	Evaluation of impact to date of mitigation efforts in relation to baseline data

Justice40 Initiative				
E1.1 Reduction of legacy methane pollution affecting rate of climate change	Pre-plugging methane measurement data	Pre-plugging methane measurement data	Pre and post plugging methane measurement data	Pre and post plugging and methane measurement data
E2.1 An increase in quality job creation, the clean energy job pipeline, and job training for individuals	Pre-plugging data baseline for plugging workforce development		Assessment of impact from plugging work in relation to workforce development	Assessment of impact from plugging work in relation to workforce development