

August 2, 2024

Internal Revenue Service CC:PA:01:PR (REG-119283-23), Room 5203 Internal Revenue Service, P.O. Box 7604 Ben Franklin Station Washington, DC 20044

Re: REG-119283-23: Comments on Section 45Y Clean Electricity Production Credit and Section 48E Clean Electricity Investment Credit

#### To Whom It May Concern:

We write to provide comments in response to the proposed regulations and request for comments published in the Federal Register by the Department of Treasury and Internal Revenue Service ("IRS") (collectively "Treasury") on June 3, 2024, related to the Clean Electricity Production Credit under section 45Y¹ and the Clean Electricity Investment Credit under section 48E (the "Proposed Regulations").² We appreciate the work of the staff at Treasury and IRS to issue the Proposed Regulations and the opportunity to provide comments as Treasury works to finalize these critical regulations to implement these new technology-neutral tax credit provisions enacted by the Inflation Reduction Act ("IRA").

The Carbon Capture Coalition (the "Coalition") is a nonpartisan collaboration of more than 100 companies, labor unions, and conservation and environmental policy organizations, building federal policy support to enable economy-wide, commercial-scale deployment of carbon management technologies to meet midcentury climate goals, strengthen and decarbonize domestic energy, industrial production, and manufacturing, while at the same time retaining and expanding a high-wage jobs base.

Since the inception of the section 45Q tax credit, members of Congress across the political spectrum have increasingly recognized the credit's essential value in bolstering the economy-wide adoption of carbon management technologies to address our changing climate. This includes support for the full value chain of carbon management technologies, carbon capture, removal, transport, utilization, and storage.

The IRA's new technology-neutral tax credits under section 45Y and section 48E present new opportunities for the use of carbon capture, utilization, and storage

<sup>&</sup>lt;sup>1</sup> Unless indicated otherwise, all "section" references are to the Internal Revenue Code of 1986, as amended (the Code), and all "Treas. Reg. §" or "Prop. Treas. Reg. §" references are to the Treasury regulations or proposed Treasury regulations, respectively, published under the Code.

<sup>&</sup>lt;sup>2</sup> Notice of Proposed Rulemaking, Section 45Y Clean Electricity Production Credit and Section 48E Clean Electricity Investment Credit, 89 Fed. Reg. 47,792 (Jun. 3, 2024).



("CCUS") technology. The statute establishes the qualification for these new technology-neutral credits for facilities placed in service for electricity production for which the greenhouse gas ("GHG") emissions rate of the underlying qualified facility or energy property is not greater than zero.<sup>3</sup> The statutory provisions expressly allow potentially qualifying projects to reduce their GHG emissions through CCUS.<sup>4</sup> Thus, the use of CCUS can allow some projects to qualify for these credits when they otherwise would not qualify in the absence of CCUS.

As described further below, Congress has already adopted a statutory framework under section 45Q and issued final regulations that relate to measuring captured carbon oxides as well as securing or utilizing such carbon oxides to claim a tax credit. Recognizing this, Congress cross referenced section 45Q and incorporated section 45Q's statutory requirements for sequestration and utilization into section 45Y and section 48E.

In January 2021, Treasury, in consultation with the Environmental Protection Agency ("EPA"), the Department of Energy ("DOE"), and the Department of Interior ("DOI") finalized regulations to implement the section 45Q credit, including determining safety measures for the geological storage of the captured carbon dioxide to ensure the carbon dioxide does not escape into the atmosphere and measures to determine the utilization of the captured carbon oxides.<sup>5</sup>

Treasury's final regulations promulgated in 2021 to implement section 45Q were developed after a public comment period and extensive industry feedback to ensure the regulations provide for the continued growth of carbon management technology and projects. The Coalition anticipates that project developers can rely on these rules for carbon capture and sequestration and for carbon capture and utilization, as modified as discussed below and as discussed in the Coalition's previous comments regarding GHG lifecycle analysis ("LCA") approval, to provide certainty for carbon management projects moving forward. Taxpayers should not have to comply with two sets of regulations for the same carbon management technology. Multiple, potentially conflicting regulations would add complexity, impose additional compliance costs on taxpayers, and could potentially stifle innovation and limit growth within the industry.

In light of the role that CCUS technologies play in the new technology-neutral credits, the Coalition urges Treasury to issue final regulations for determining the GHG emissions rate for projects that use CCUS technology under section 45Y or section 48E that are consistent with the GHG emissions rate determination under section 45Q. In

<sup>&</sup>lt;sup>3</sup> Sections 45Y(b)(1)(A)-(B); 48E(a)(1)(A), (b)(3)(A)(i)-(iii).

<sup>&</sup>lt;sup>4</sup> Sections 45Y(b)(2)(D); 48E(b)(3)(B)(ii).

<sup>&</sup>lt;sup>5</sup> See 86 Fed. Reg. 4,728 (Jan. 15, 2021).

<sup>&</sup>lt;sup>6</sup> See IRS-2022-0028-0110 (Comments of Carbon Capture Coalition to Notice 2022-57, Request for Comments on the Credit for Carbon Oxide Sequestration), *available at* <a href="https://www.regulations.gov/comment/IRS-2022-0028-0110">https://www.regulations.gov/comment/IRS-2022-0028-0110</a>.



addition, below we respond to Treasury's request for additional comments related to CCUS technologies.<sup>7</sup>

Specifically, the Coalition's membership worked collaboratively to develop the following recommendations to implement provisions related to CCUS under sections 45Y and 48E, which are discussed further below:

- The Coalition recommends that the final regulations track the statutory language with respect to the treatment of qualified carbon dioxide within the meaning of section 45Q to avoid confusion and to more clearly reflect the taxpayer-favorable nature of the rule.
- To determine the GHG emission rates for projects that use CCUS technology to qualify for the section 45Y or section 48E credit, the Coalition recommends that the final regulations apply the current substantiation and verification requirements under section 45Q for captured carbon oxide, including the current secure geological storage requirements under Treas. Reg. § 1.45Q-3 and the current utilization requirements under Treas. Reg. § 1.45Q-4, as modified by subsequent guidance regarding the LCA approval process as discussed in the Coalition's previous comments.
- The Coalition recommends that the final regulations incorporate the current reporting and requirements under Treas. Reg. § 1.45Q-3 for secure geological storage, including allowing the taxpayer to contract with a third party for secure geological storage activities consistent with the requirements under Treas. Reg. § 1.45Q-1(h)(2), and apply information reporting requirements consistent with IRS Form 8933.
- The Coalition recommends that the current utilization methods under Treas. Reg. § 1.45Q-4(a), as modified by subsequent guidance regarding the LCA approval process as discussed in the Coalition's previous comments, apply if utilization is used for the purposes of measuring GHGs emitted into the atmosphere for the section 45Y and section 48E credits.
- The Coalition recommends that Treasury not require DOE pre-approval of an LCA for projects relying on utilization to claim the section 45Y or section 48E credits.
- Final regulations should incorporate the current section 45Q recapture
  requirements under Treas. Reg. § 1.45Q-5 to address captured and sequestered
  carbon oxide that subsequently escapes into the atmosphere for a taxpayer that
  claimed a credit under section 45Y or section 48E. Consistent with Treas. Reg. §
  1.45Q-5, the Coalition recommends that the final regulations apply a three-year
  recapture period; provide a limited exception from the recapture rules for leakage

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<sup>&</sup>lt;sup>7</sup> See 89 Fed. Reg. at 47,810.



from actions unrelated to the selection, operation, or maintenance of the storage facility; and not apply the recapture rules to taxpayers that rely on utilization to qualify for the section 45Y or section 48E credit.

 The Coalition recommends that the final regulations account for carbon capture and sequestration throughout the entire fuel production chain for fuel that is used by a facility to produce electricity to qualify for the section 45Y or section 48E credit.

We appreciate your consideration of these recommendations and look forward to the issuance of final regulations that will facilitate much-needed investment in CCUS equipment to bring new projects online, reduce greenhouse gas emissions, and reach our climate targets.

I. Final regulations should track the statutory language regarding the treatment of qualified carbon dioxide.

Section 45Y(b)(2)(D) and section 48E(b)(3)(B)(ii) provide that the amount of GHGs emitted into the atmosphere by a facility or "shall not include any qualified carbon dioxide." Consistent with the statute, the Proposed Regulations provide that the GHG emissions rate that determines eligibility under both section 45Y and section 48E "must exclude any qualified carbon dioxide" captured by the taxpayer and either disposed of by the taxpayer in secure geological storage pursuant to the regulations under section 45Q(f)(2) or utilized by the taxpayer in secure geological storage in a manner described in section 45Q(f)(5).8 Although the "must exclude" language in the Proposed Regulations appears equivalent to the "shall not include" language of the statute, the Coalition recommends that the final regulations track the statutory language to avoid confusion and to more clearly reflect the taxpayer-favorable nature of the rule.9

II. Final regulations should apply the current substantiation and verification requirements under section 45Q for captured carbon oxide that is sequestered or utilized.

To qualify for the section 45Q credit, taxpayers must physically or contractually dispose of captured carbon oxide in secure geological storage in the manner provided in Treas. Reg. § 1.45Q-3(b) or utilize qualified carbon oxide in a manner conforming with section 45Q(f)(5) and Treas. Reg. § 1.45Q-4.<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> Prop. Treas. Reg. §§ 1.45Y-5(e); 1.48E-5(e).

<sup>&</sup>lt;sup>9</sup> The Coalition further recommends that Treasury avoid the language used in the preamble to the Proposed Regulations, stating that "the amount of greenhouse gases emitted into the atmosphere by a facility in the production of electricity *cannot include* any qualified carbon dioxide." 86 Fed. Reg. 47,793 (emphasis added). Treasury should consistently use the statutory language "shall not include" when describing this rule.

<sup>&</sup>lt;sup>10</sup> See section 45Q(f)(3).



The Coalition recommends that the final regulations be consistent with the current requirements under section 45Q and the accompanying regulations under Treas. Reg. § 1.45Q-3 and Treas. Reg. § 1.45Q-4 to substantiate and verify that carbon oxide captured by the taxpayer is sequestered in secure geological storage or utilized by the taxpayer.<sup>11</sup>

### A. Final regulations should incorporate the current section 45Q sequestration requirements under Treas. Reg. § 1.45Q-3.

The amount of carbon oxide disposed of by the taxpayer in secure geological storage for the purposes of section 45Y and section 48E should be consistent with the current section 45Q regulations for sequestration for facilities placed in service on or after February 9, 2018.

The Coalition recommends that the final regulations incorporate the current regulations under Treas. Reg. § 1.45Q-3 for "secure geological storage." Under these regulations secure geological storage includes, but is not limited to, storage in deep saline formations, oil and gas reservoirs, and unminable coal seams. 12 Carbon oxide is considered disposed of in secure geological storage if the carbon oxide is: (1) injected into a well that complies with applicable Underground Injection Control regulations onshore or offshore under submerged lands within the territorial jurisdiction of the United States; and (2) stored and not used as a tertiary injectant in a qualified enhanced oil recovery ("EOR") or natural gas recovery project, in compliance with applicable requirements under 40 C.F.R. Part 98 subpart RR; or (3) used as a tertiary injectant in a qualified EOR or natural gas recovery project and stored in compliance with applicable requirements under 40 C.F.R. Part 98 subpart RR, or the International Organization for Standardization ("ISO") Standards endorsed by the American National Standards Institute ("ANSI") under CSA/ANSI ISO 27916:19, Carbon dioxide capture, transportation and geological storage—Carbon dioxide storage using enhanced oil recovery (CO2-EOR) (CSA/ANSI ISO 27916:2019).13

The Coalition recommends that the final regulations incorporate the current section 45Q reporting and certification requirements for sequestration under Treas. Reg. § 1.45Q-3. If a taxpayer uses qualified EOR or natural gas recovery projects to qualify for the section 45Y or section 48E credits, the reporting that is used to determine the amount of carbon oxide sequestered should be evaluated under the subpart RR or the CSA/ANSI ISO regulations described above. Consistent with the section 45Q regulations, if the taxpayer reports the sequestered carbon to the EPA under subpart RR, the final regulations should allow the taxpayer to self-certify the volume of

<sup>&</sup>lt;sup>11</sup> Section 45Y(b)(2)(D) refers specifically to "qualified carbon dioxide," rather than "qualified carbon oxide." A corresponding substitution of the phrase "qualified carbon dioxide" for the phrase "qualified carbon oxide" where it appears in the relevant regulations under section 45Q would be appropriate.

<sup>&</sup>lt;sup>12</sup> See Treas. Reg. § 1.45Q-3(a).

<sup>&</sup>lt;sup>13</sup> Treas. Reg. § 1.45Q-3(b)(1)-(2).



sequestered carbon oxide for the purposes of section 45Y or section 48E.<sup>14</sup> If the taxpayer reports the sequestered carbon under the CSA/ANSI ISO standards, the final regulations should require an independent engineer or geologist to certify the reporting and require the certification be made under penalty of perjury.<sup>15</sup>

If the taxpayer is not physically carrying out the disposal, injection, or other activity to ensure the secure geological storage, the Coalition recommends that the final regulations allow the taxpayer to contract with a third party for such activities consistent with the requirements under Treas. Reg. § 1.45Q-1(h)(2).<sup>16</sup>

To claim the section 45Q sequestration credit, the taxpayer must file IRS Form 8933 with their tax return.<sup>17</sup> If a taxpayer uses sequestration to qualify for the section 45Y or section 48E credit, the Coalition recommends that the required information reporting under the final regulations be consistent with the required information reporting for IRS Form 8933.

B. Final regulations should incorporate the current section 45Q utilization requirements under Treas. Reg. § 1.45Q-4, as modified as discussed below regarding the LCA approval process.

The amount of carbon oxide utilized by the taxpayer for the purposes of qualifying for the section 45Y or section 48E credit should be consistent with the current section 45Q regulations under Treas. Reg. § 1.45Q-4 for utilization.

The section 45Y and section 48E statutory scheme provides that any qualified carbon dioxide that is captured through carbon capture and sequestration equipment pursuant to section 45Q(f) is not considered an amount of GHGs emitted into the atmosphere by the facility in the production of electricity. Reg. § 1.45Q-4, the Coalition recommends that the amount of carbon dioxide utilized by the taxpayer for the purposes of section 45Y or section 48E (and thus excluded from the measure of GHGs emitted into the atmosphere) be equal to the metric tons of carbon oxide which the taxpayer demonstrates were captured and permanently isolated from the atmosphere, or displaced from being emitted into the atmosphere, through utilization in a process described in section 45Q(f)(5)(A) and Treas. Reg. § 1.45Q-4(a).

Section 45Q(f)(5)(A) and the accompanying regulations under Treas. Reg. § 1.45Q-(4)(a) describe three methods for how captured carbon oxide can be utilized to

<sup>&</sup>lt;sup>14</sup> See Treas. Reg. § 1.45Q-3(d)

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> See Treas. Reg. § 1.45Q-1(h)(2).

<sup>&</sup>lt;sup>17</sup> Treas. Reg. § 1.45Q-3(c).

<sup>&</sup>lt;sup>18</sup> Sections 45Y(b)(2)(D), 48E(b)(3)(B)(ii).

<sup>&</sup>lt;sup>19</sup> See section 45Q(f)(5)(B)(i)(I)-(II); Treas. Reg. § 1.45Q-4(b).



qualify for the section 45Q utilization credit: (1) the fixation of qualified carbon dioxide through photosynthesis or chemosynthesis (e.g. through the growing of algae or bacteria); (2) the chemical conversion of qualified carbon oxide to a material or chemical compound in which the qualified carbon dioxide is securely stored; and (3) the use of qualified carbon oxide for any other purpose for which the IRS determines a commercial market exists (except for use as a tertiary injectant in a qualified enhanced oil or natural gas recovery project).<sup>20</sup> The Coalition recommends that these same utilization methods under Treas. Reg. § 1.45Q-4(a) apply for the purposes of measuring GHGs emitted into the atmosphere in determining qualification for section 45Y or section 48E credits.

Contrary to the section 45Q credit for sequestration, taxpayers claiming the section 45Q credit for utilization are not required to engage in GHG reporting to the EPA. Rather, taxpayers must account for the GHG emissions that are utilized by performing an LCA that is subject to the requirements specified by the IRS, in consultation with the DOE and the EPA.<sup>21</sup> The LCA must demonstrate that the proposed utilization process results in a net reduction of carbon dioxide equivalents.<sup>22</sup> The LCA must also conform with certain ISO requirements and guidelines and an independent third-party must review the LCA.<sup>23</sup> Last, the taxpayer must submit the LCA and an independent third-party statement to the IRS and DOE for review.<sup>24</sup>

The Coalition recommends that the final regulations not require GHG reporting for taxpayers engaging in utilization to qualify for the section 45Y or section 48E credit. Instead, the Coalition recommends that the final regulations require the taxpayer to perform an LCA consistent with the requirements under Treas. Reg. § 1.45Q-4(c) (modified as discussed below) if the taxpayer is engaging in utilization to qualify for the section 45Y or section 48E credit.

C. Final regulations should not require DOE pre-approval of the LCA for projects relying on utilization to claim the section 45Y or section 48E credits.

Although the Coalition recommends incorporation of the section 45Q utilization rules for purposes of determining GHG emissions under sections 45Y and 48E, the Coalition recommends that the final regulations and guidance for taxpayers using utilization to qualify for the section 45Y or section 48E credits not require DOE's pre-

<sup>&</sup>lt;sup>20</sup> Section 45Q(f)(5)(A)(i)-(iii); Treas. Reg. § 1.45Q-4(a)(1)-(3).

<sup>&</sup>lt;sup>21</sup> See section 45Q(f)(5)(B)(i), Treas. Reg. § 1.45Q-4(c).

<sup>&</sup>lt;sup>22</sup> Treas. Reg. § 1.45Q-4(c)(2).

<sup>&</sup>lt;sup>23</sup> Treas. Reg. § 1.45Q-4(c)(3),(4).

<sup>&</sup>lt;sup>24</sup> Treas. Reg. § 1.45Q-4(c)(5).



approval of the LCA. The Coalition previously filed comments in response to Notice 2022-57 requesting this change under the section 45Q regulations as well.<sup>25</sup>

DOE is not required under the statute to conduct a new review of an LCA report for each taxpayer for each taxable year. However, the effect of the current Treasury regulations and informal DOE guidance interpreting the LCA requirement for utilization under section 45Q is to require an annual approval process, which creates a significant barrier for utilization technologies to benefit from the section 45Q tax credit. Treasury regulations require the pre-approval of an LCA prior to claiming the section 45Q credits for such taxable year.<sup>26</sup> It is not clear from the regulatory language whether this requires a one-time approval or an annual report and approval. DOE has further clarified that a new LCA report must be submitted for review for each taxable year, and that it must use actual data.<sup>27</sup> However, Treasury recently issued Notice 2024-60 that provides, as described further below, that a taxpayer may treat an approved LCA as approved for a three-year period.<sup>28</sup> Taxpayers still lack certainty that they will qualify for the section 45Q credit at the time a project is placed in service. As tax equity investors and potential tax credit transferees under section 6418 require certainty to make needed investments in projects to generate tax credits, an LCA pre-approval process will likely severely limit investment in projects that rely on utilization to qualify for the section 45Y or section 48E credit.

The Coalition recommends that the final regulations provide taxpayers an option to obtain pre-approval of the LCA before claiming section 45Y or section 48E credit. This option could use estimates of future data as inputs, giving taxpayers confidence in the soundness of the LCA methodology. This LCA methodology could then be applied each year using actual data in taxpayer returns, with any residual issues with the LCA addressed during audit. Audit review of the LCA would then normally be limited to issues with input data.

Under this optional pre-approval process, DOE should provide technical review and feedback to the taxpayer regarding a submitted LCA. Such a process should allow the taxpayer to interact and work with DOE to incorporate the technical input and refine the LCA rather than leaving the taxpayer only with an approved or declined LCA.

DOE and IRS's review of an LCA for purposes of determining GHG emissions under sections 45Y and 48E should use existing resources developed by DOE and the National Energy Technology Laboratory ("NETL") in connection with the section 45Q

<sup>&</sup>lt;sup>25</sup> See IRS-2022-0028-0110 (Comments of Carbon Capture Coalition to Notice 2022-57, Request for Comments on the Credit for Carbon Oxide Sequestration), *available at* <a href="https://www.regulations.gov/comment/IRS-2022-0028-0110">https://www.regulations.gov/comment/IRS-2022-0028-0110</a>.

<sup>&</sup>lt;sup>26</sup> See Treas. Reg. § 1.45Q-4(c)(6).

<sup>&</sup>lt;sup>27</sup> National Energy Technology Lab ("NETL") 45Q LCA Guidance Toolkit at § 2.1.6.3, *available at* https://netl.doe.gov/LCA/CO2U/45Q.

<sup>&</sup>lt;sup>28</sup> Sections 6.01-6.02, Notice 2024-60 (Jul. 24, 2024), available at <a href="https://www.irs.gov/pub/irs-drop/n-24-60.pdf">https://www.irs.gov/pub/irs-drop/n-24-60.pdf</a>.



credit, including NETL's 45Q LCA Guidance Toolkit's comparison product system information and openLCA tool to translate an LCA into required charts. PNETL's 45Q LCA Guidance Toolkit is being updated to include additional resources to assist applicants in developing LCAs that satisfy the criteria for the section 45Q credit, facilitate timely technical reviews, and improve transparency. DOE has also been working in close coordination with the IRS to continuously improve these resources based on questions from stakeholders and trends in LCAs reviewed to date. Treasury also recently issued Notice 2024-60 to provide additional guidance and procedures for submitting and obtaining approval of an LCA for the section 45Q credit, which incorporates the most current revision of DOE's NETL Carbon Dioxide Utilization (CO2U) Life Cycle Analysis Guidance and section 45Q Addendum. The final regulations should apply these existing tools and guidance for the purposes of determining GHG emissions for the section 45Y and section 48E credits.

Such an approach would limit the uncertainty associated with annual reviews of each taxpayer's entire LCA methodology, and limit impediments to taxpayers placing utilization projects into service.

Treasury should also work with DOE and EPA to identify circumstances in which updates to LCA methodology would be warranted, in the event that significant new information becomes available calling into question the validity of a taxpayer's previously-approved LCA methodology, and procedures for resubmission and approval of an updated LCA methodology.

III. Final regulations should incorporate the current section 45Q recapture requirements under Treas. Reg. § 1.45Q-5 to address captured and sequestered carbon oxide that subsequently escapes into the atmosphere for a taxpayer that claimed a credit under section 45Y or section 48E.

The section 45Q statute directs Treasury to promulgate regulations to address the recapture of carbon oxide that subsequently escapes after a taxpayer claims the credit.<sup>33</sup> Treasury issued final regulations in 2021 under Treas. Reg. § 1.45Q-5 to address the section 45Q credit recapture requirements.<sup>34</sup>

If carbon oxide has leaked into the atmosphere, Treas. Reg. § 1.45Q-5(d) states that the recapture amount is the leaked amount of qualified carbon oxide that exceeds

<sup>&</sup>lt;sup>29</sup> See NETL 45Q LCA Guidance Toolkit, available at https://netl.doe.gov/LCA/CO2U/45Q.

<sup>&</sup>lt;sup>30</sup> See Press Release, Department of Energy, 45Q Carbon Oxide Conversion LCA Training Workshop (Jul. 17, 2024), *available at* <a href="https://www.energy.gov/fecm/events/45q-carbon-oxide-conversion-lca-training-workshop.">https://www.energy.gov/fecm/events/45q-carbon-oxide-conversion-lca-training-workshop.</a>

<sup>&</sup>lt;sup>31</sup> *Id*.

<sup>&</sup>lt;sup>32</sup> See Notice 2024-60 (Jul. 24, 2024), available at <a href="https://www.irs.gov/pub/irs-drop/n-24-60.pdf">https://www.irs.gov/pub/irs-drop/n-24-60.pdf</a>.

<sup>&</sup>lt;sup>33</sup> See section 45Q(f)(4).

<sup>&</sup>lt;sup>34</sup> See Treas. Reg. §1.45Q-5; see also 86 Fed. Reg. 4,728 (Jan. 15, 2021).



the amount of qualified carbon dioxide disposed in secure geological storage or used as a tertiary injectant in that tax year and the leaked amount of carbon oxide shall be subtracted from the amount of carbon oxide that is securely stored in the taxable year. Treas. Reg. 1.45Q-5(g)(2) requires that the accounting for the amount of recapture is performed on a last-in/first-out ("LIFO") basis. If the amount of leakage that has occurred in the recapture period exceeds the amount of carbon oxide that was disposed of or used as a tertiary injectant in that current taxable year, the leakage excess is applied to the first preceding year, then the second preceding year, and up to a maximum of the third preceding year. The second preceding year, and up to a

The Coalition recommends that the final regulations apply similar recapture requirements for the section 45Y and section 48E credits as provided in Treas. Reg. § 1.45Q-5(d).

#### A. Final regulations should apply a three-year recapture period.

Treas. Reg. § 1.45Q-5(f) applies a three-year recapture period. The recapture period was reduced in the final regulations from five years to three years in response to requested changes from commenters to the proposed regulations.<sup>37</sup> In the preamble to the final section 45Q regulations, Treasury determined that a three-year period was sufficient because the risk of leakage is greatest in the year of injection and thereafter significantly decreases as the carbon oxide becomes stable.<sup>38</sup> Further, Treasury noted that a three-year recapture period sufficiently accounts for risk and reduces the compliance burden that would be imposed by a five-year recapture period.<sup>39</sup>

Treas. Reg. § 1.45Q(f) starts the recapture period on the date of the first injection of carbon oxide for disposal in secure geological storage or use as a tertiary injectant.<sup>40</sup> The recapture period ends on the earlier of three years after the last taxable year in which the taxpayer claimed a section 45Q credit or was eligible to claim a credit that it elected to carry forward, or the date monitoring ends under the requirements of the standards described in Treas. Reg. §1.45Q-3(b)(1) or Treas. Reg. §1.45Q-3(b)(2).<sup>41</sup>

The Coalition recommends that the final regulations apply a similar three-year recapture period consistent with the recapture period under Treas. Reg. 1.45Q-5(f) for taxpayers relying on sequestration to qualify for the section 45Y or section 48E credit.

<sup>&</sup>lt;sup>35</sup> Treas. Reg. § 1.45Q-5(d).

<sup>&</sup>lt;sup>36</sup> Treas. Reg. § 1.45Q-5(g)(2).

<sup>&</sup>lt;sup>37</sup> Prop Treas. Reg. 1.45Q-5(f); 85 Fed. Reg. 34,050, 34,074 (Jun. 2, 2020).

<sup>&</sup>lt;sup>38</sup> 86 Fed. Reg. at 4,750.

<sup>&</sup>lt;sup>39</sup> *Id*.

<sup>&</sup>lt;sup>40</sup> Treas. Reg. § 1.45Q-5(f).

<sup>&</sup>lt;sup>41</sup> Treas. Reg. § 1.45Q-5(f).



## B. Final regulations should include limited exceptions that do not trigger a recapture event.

Treas. Reg. § 1.45Q-5(i) provides an exception from the recapture rules for leakage from actions unrelated to the selection, operation, or maintenance of the storage facility, such as in the case of volcanic activity or a terrorist attack. The Coalition recommends that the final regulations provide similar limited exceptions that would not trigger credit recapture under section 45Y or section 48E.

## C. Final regulations should not apply the recapture rules to taxpayers relying on utilization to claim a credit under section 45Y or section 48E.

Under the section 45Q statute and Treas. Reg. § 1.45Q-5(a), a recapture event only occurs when carbon oxide for a which a section 45Q credit was previously claimed ceases to be disposed of in a secure geological storage or used as a tertiary injectant during the recapture period. As a result, the recapture rules under Treas. Reg. § 1.45Q-5 do not apply to taxpayers who previously claimed the section 45Q credit for utilization. Consistent with the section 45Q statute and Treas. Reg. § 1.45Q-5, the Coalition recommends that the final regulations not apply recapture rules to taxpayers that rely on utilization to qualify for the section 45Y or section 48E credit.

As noted above, the section 45Q statute requires taxpayers claiming the section 45Q credit for utilization to perform an LCA.<sup>43</sup> The Coalition recommends that the final regulations instead rely on an LCA process consistent with Treas. Reg. 1.45Q-4(c) that already accounts for escaped carbon oxide.

# IV. Final regulations should account for carbon capture and sequestration throughout the entire fuel production chain for fuel that is used to produce electricity.

The Coalition recommends that the final regulations take into account any carbon capture that occurs throughout the production, midstream, and downstream fuel production supply chain for any fuel that is used by a facility to produce electricity to qualify for the section 45Y or section 48E credit.

This recommendation is consistent with the statutory requirements under section 45Y(b)(2)(D) and section 48E(b)(3)(B)(ii), which both exclude all qualified carbon dioxide that is captured by the taxpayer. For example, section 45Y(b)(2)(D) provides:

(D) Carbon capture and sequestration equipment

<sup>43</sup> See section 45Q(f)(5)(B)(i), Treas. Reg. § 1.45Q-4(c).

<sup>&</sup>lt;sup>42</sup> Section 45Q(f)(4); Treas. Reg. § 1.45Q-5(a).



For purposes of this subsection, the amount of greenhouse gases emitted into the atmosphere by a facility in the production of electricity <u>shall not include any qualified carbon dioxide that is captured by the taxpayer</u> and—

- (i) pursuant to any regulations established under paragraph (2) of section 45Q(f), disposed of by the taxpayer in secure geological storage, or
- (ii) utilized by the taxpayer in a manner described in paragraph (5) of such section.<sup>44</sup>

The final regulations should affirm that all carbon dioxide that is captured by the taxpayer in the production of fuel that is used to produce electricity and sequestered consistent with Treas. Reg. § 1.45Q-3 or utilized consistent with Treas. Reg. § 1.45Q-4 is excluded from the emissions rates for determining eligibility for the section 45Y or section 48E credit.

In summary, as described above, the Coalition recommends that the final regulations incorporate the existing sequestration regulations under Treas. Reg. § 1.45Q-3, the existing utilization regulations under Treas. Reg. § 1.45Q-4 (modified as discussed above), and the existing recapture provisions under Treas. Reg. § 1.45Q-5.

The Coalition looks forward to working with Treasury on these critical issues. If you have any questions regarding this submission, please contact me at <a href="mailto:istolark@carboncapturecoalition.org">istolark@carboncapturecoalition.org</a>.

Sincerely,

Jessie Stolark Executive Director

1/K Stolark

Carbon Capture Coalition

<sup>&</sup>lt;sup>44</sup> See, e.g., section 45Y(b)(2)(D) (emphasis added).