# CLASS VI PERMIT APPLICATION NARRATIVE 40 CFR 146.82(a)

**INSERT PROJECT NAME**

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| **INSTRUCTIONS**  To reduce the potential for redundancy and to organize permit application components in a manner that facilitates efficient review by the permitting authority, EPA recommends that Class VI permit applicants submit both:   1. A narrative with a characterization of the proposed site, overall strategies for site operations, and other general project information (compiled into a single file and submitted using the Project Information Tracking module of the GSDT). 2. Specific, detailed information required by certain Class VI Rule provisions (submitted using other GSDT modules, which are tailored to the applicable Class VI Rule requirements).   This template provides a suggested outline for the narrative component of the permit application. Permit applicants are not required to use this template. This document does not substitute for promulgated provisions or regulations, nor is it a regulation itself, and it does not impose legally-binding requirements on the U.S. Environmental Protection Agency (EPA), states, or the regulated community.  Note that references to EPA’s Class VI Rule in the code of federal regulations (CFR) are provided in this template. States with Class VI primacy have requirements that are at least as stringent as EPA’s. If your Class VI well is in a primacy state, consult your permitting authority about any additional requirements for what must be included in the permit application.  In this template, instructions or suggestions appear in ***blue text***. These are provided to assist with site- and project-specific permit application development. These are recommendations and are not required elements of the federal Class VI Rule.  Please delete the ***blue text*** and replace the yellow highlighted text before submitting your document. Similarly, please adjust the example text and tables throughout as necessary (e.g., by adding or removing rows or columns). Appropriate maps, figures, references, etc. should also be included to support the text. If desired, appendices, attachments, or other supplemental information associated with the narrative that do not fit into one of the specific GSDT modules can be uploaded directly to the Project Information Tracking module using the module field designated for “any other information requested by the UIC Program Director.”  For more information, see EPA’s Class VI guidance documents at <https://www.epa.gov/uic/class-vi-guidance-documents>.  This narrative file does not need to repeat any information submitted with the GSDT, but it should clearly reference these other submissions to ensure that all Class VI requirements are met. EPA recommends that you review the GSDT modules and/or user guides for each topic area below before developing your narrative, to avoid duplicating efforts or information.  After completing the narrative, upload it to the Project Information Tracking GSDT module, on the Initial Permit Application tab. EPA recommends converting to PDF prior to uploading. |

## Project Background and Contact Information

*[In this section, provide a brief overview of your proposed project. Examples of potential content include (but are not limited to):*

* *Project goals.*
* *Partners/collaborators.*
* *Overview of the project timeframe.*
* *Proposed injection mass/volume and CO2 source.*
* *Whether an injection depth waiver or aquifer exemption expansion is being requested.*

*Also, include a list of state, tribe, and territory contacts as described at 40 CFR 146.82(a)(20).*

*Key project and facility details required by 40 CFR 146.82(a)(1) can be submitted directly in the Project Information Tracking module of the GSDT.]*

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| **GSDT Submission - Project Background and Contact Information** |
| ***GSDT Module:*** Project Information Tracking  ***Tab(s):***General Information tab; Facility Information and Owner/Operator Information tab  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Required project and facility details ***[40 CFR 146.82(a)(1)]*** |

## Site Characterization

*[In this section, provide text, tables, figures, and/or other relevant material to fulfill the site characterization requirements for the permit application, listed at 40 CFR 146.82(a)(2), (3), (5), and (6). Please cite references as appropriate. You may attach supporting documentation in one o more separate files using the field for “any other information requested by the UIC Program Director” in the Project Information Tracking module.*

*The Class VI Rule recognizes that project sites will have varying levels of pre-existing information and that some data submitted with a permit application will be preliminary. As part of the site characterization narrative, EPA recommends discussing data gaps and uncertainties that will be addressed through the formation testing program and other activities conducted after well construction/conversion, but before receiving authorization to inject.*

*In general, the subsections below follow the order used in the UIC Program Class VI Well Site Characterization Guidance; see that document for further information.]*

### Regional Geology, Hydrogeology, and Local Structural Geology [40 CFR 146.82(a)(3)(vi)]

*[EPA recommends that the maps and cross sections required by 40 CFR 146.82(a)(3)(vi) be accompanied by a brief narrative describing the regional geology and hydrogeology (e.g., including stratigraphy, structure, and tectonic history) near the proposed injection site, as well as local structural geology.*

*Recommended considerations include:*

* *What are characteristics of the injection and confining zones (names, lithology, depth, etc.)? How consistent are these characteristics regionally?*
* *What is the general geologic history of the region and the project site?*
* *What are the major geologic features (e.g., faults, synclines/anticlines, etc.) near the proposed injection site?*
* *How does the proposed project site fit into the regional geologic setting?]*

*[Associated figures may include:*

* *Maps, cross sections, and stratigraphic columns showing regional geologic features and characteristics.]*

### Maps and Cross Sections of the AoR [40 CFR 146.82(a)(2), 146.82(a)(3)(i)]

*[EPA recommends that the maps and cross sections required by 40 CFR 146.82(a)(2) and (3)(i) be accompanied by a brief narrative description interpreting the figures and providing an overview of key features important to the project.*

*Recommended considerations include:*

* *What is the spatial relationship between the proposed project site and regional geologic features such as faults or the lowermost USDW? What is the relationship between the proposed injection formation and other site-specific geologic characteristics?*
* *Is there any evidence of regional formation pinch-out? Is the proposed storage site influenced by a structural trap (e.g., faults or a dome)?*
* *What is the lateral extent of the proposed injection and confining formations? Are they continuous throughout the proposed site? How was this determined?*
* *Are there any secondary confining zones between the proposed injection formation and the lowermost USDW?]*

*[Associated figures may include:*

* *Map identifying the location of all wells, subsurface sites, surface water, and other features listed in 40 CFR 146.82(a)(2) that are within the AoR.*
* *Maps and cross section with information including lithology, the sequence of geologic units (including the proposed injection formations, confining units, and USDWs), approximate formation thicknesses, lateral extent of units, correlation of units in the vicinity of the proposed project site.]*

### Faults and Fractures [40 CFR 146.82(a)(3)(ii)]

*[Recommended considerations include:*

* *Are there known or suspected faults and/or fractures within the AoR? Do these features transect the injection zone?*
* *What information was used to determine that faults and fractures do not pose a threat to containment? How was this determination made?*
* *How stable are faults? What is the sealing capacity of faults/fractures? What methods were used to determine the stability and sealing capacity?*
* *Is there evidence that faults and/or fractures in the injection zone may provide conduits for preferential fluid flow?*
* *What uncertainties are there in fault and fracture characterization data? How might these uncertainties be addressed with pre-operational testing?]*

*[Associated figures may include:*

* *Map showing the location, orientation, and properties of all known or suspected faults and fractures that may transect the confining zone(s) in the AoR.*
* *Map identifying major faults and fractures in the injection zone, with information on the connectivity and extent of these features.*
* *Results of geophysical survey data used to delineate faults and characterize their geometry.*
* *Other plots or figures to support a determination of fault stability and potential for reactivation.]*

### Injection and Confining Zone Details [40 CFR 146.82(a)(3)(iii)]

*[Recommended considerations include:*

* *What is the depth, areal extent, and thickness of the injection and confining zones? What methods were used to determine this?*
* *How variable is the thickness of the injection and confining zones within the AoR? How might this affect carbon dioxide storage and confinement?*
* *How many samples were used to determine injection and confining zone properties? How is this sufficient to characterize formation mineralogy? To characterize porosity and permeability?*
* *What is the mineralogy and petrology of the injection and confining zones?*
* *Are any geochemical reactions more likely given the mineralogical makeup of either the injection or confining zone? How might these geochemical reactions affect carbon dioxide storage and containment? Note: This information may overlap with the discussion of site geochemistry. Please include cross-references as applicable.*
* *Is the mineralogy of the injection and confining zones compatible with the proposed carbon dioxide stream?*
* *What is the average permeability and porosity of the injection and confining zones? What is the spatial distribution of porosity and permeability values within the injection and confining zones?*
* *What data were used to determine permeability and porosity?*
* *What is the estimated storage capacity and injectivity of the injection zone? What is the integrity of the confining zone?*
* *What is the capillary pressure of the confining zone? How was this determined? Does this significantly affect the ability of carbon dioxide to penetrate the confining zone?*
* *What indirect geophysical methods were employed to determine the extent, depth, thickness, and lithology of the injection and confining zones? How well did these results compare to other characterization methods (e.g., core analysis, wireline logs, etc.)?*
* *What additional information may be required to adequately characterize the injection and confining zones? Will this information be collected during pre-operational testing?*
* *What sources of uncertainty are there? How will these be addressed?]*

*[Associated figures may include:*

* *Isopach and isochore maps showing stratigraphic and vertical thickness.*
* *Well log data (if available).*
* *Geophysical survey results.*
* *Maps showing locations and depths of samples collected (if any).*
* *Maps and/or cross sections showing the distribution of porosity and permeability within the confining and injection zones. Note: Similar maps and cross sections may need to be included with the AoR and Corrective Action Plan. Please include cross-references as applicable.*
* *Tabular results of permeability and porosity data (from the laboratory) or the results of field measurements and estimations of permeability and porosity distribution.]*

### Geomechanical and Petrophysical Information [40 CFR 146.82(a)(3)(iv)]

*[Recommended considerations include:*

* *What methods were used to determine the geomechanical and petrophysical characteristics of the confining zone? How many samples were collected? From what depths?*
* *Where any fractures identified through geomechanical tests? Please cross-reference the Faults and Fractures section as applicable.*
* *What is the average ductility of the confining zone? How consistent is this throughout the confining zone?*
* *What is the average rock strength of the confining zone? How consistent is this?*
* *What is the in situ stress field of the confining zone? Is this consistent with the proposed injection pressures and fault stability analyses?*
* *What is the average pore pressure of the confining zone (if available at this stage of the project)?*
* *Were there any anomalies or uncertainties in the data? How will these be addressed during pre-operational testing?*
* *How consistent are the results of different tests? What are the causes of any inconsistencies? Can these be addressed with additional testing?]*

*[Associated figures may include:*

* *Results in a tabular and/or graphical form.]*

### Seismic History [40 CFR 146.82(a)(3)(v)]

*[Please include a brief narrative description of the seismic history of the project site, as required by 40 CFR 146.82(a)(3)(v). This description should include the presence and depth of all seismic sources, and a demonstration that seismic activity does not pose a threat to carbon dioxide containment.*

***Note: As applicable, the information included in this subsection should be consistent with the Testing and Monitoring Plan [40 CFR 146.90] and the Emergency and Remedial Response Plan [40 CFR 146.94].***

*Recommended considerations include:*

* *What sources of data were used to characterize the seismic history of the site? Be sure to cite references as applicable.*
* *What seismic sources exist within the AoR and regionally? How active are these sources?*
* *Was a seismic risk threshold used or established to determine site-specific earthquake risk? What was the source of this threshold, or how was it calculated?*
* *If data suggests a substantial risk of seismic activity, what is the risk to subsurface containment? What other geologic data (e.g., geomechanical data, fault stability analyses, etc.) help demonstrate that seismic activity does not pose a risk to containment?]*

*[Associated figures may include:*

* *Tabular presentation of seismic sources and depths.*
* *Tabular presentation of historical seismic events and relevant details.*
* *Map showing the location and depth of known seismic sources within and near the AoR.]*

### Hydrologic and Hydrogeologic Information [40 CFR 146.82(a)(3)(vi), 146.82(a)(5)]

*[Recommended considerations include:*

* *What is the depth and location of all USDWs, water wells, and springs within the AoR? What is the direction of regional groundwater flow?*
* *What sources of data were used to determine regional and site-specific hydrologic and hydrogeologic characteristics? What, if any, field surveys or additional methods were used to fill data gaps?]*

*[Associated figures may include:*

* *Maps and cross sections indicating the location and depth of USDWs. Note: Information pertaining to the location and depth of USDWs within the AoR should be included in the cross sections submitted to satisfy requirements at 40 CFR 146.82(a)(3)(i).*
* *Potentiometric or isopach maps.]*

### Geochemistry [40 CFR 146.82(a)(6)]

*[Recommended considerations include:*

* *What are the sources of data used to determine fluid- and solid-phase geochemistry at the project site? Was any primary data collected (e.g., from a test well) for this permit?*
* *Are there any limitations or uncertainties regarding the quality of pre-existing data used to characterize geochemistry?*
* *What parameters were analyzed? Why were these parameters selected? Were the same parameters analyzed for all formations (injection, confining, USDWs, etc.)? Note: The parameters analyzed for site characterization should be consistent with the testing and monitoring and PISC plans. If there are differences, please discuss the reasons.*
* *How many samples were collected? Where were they collected? What methods were used to analyze the parameters listed above?*
* *What is the solid-phase geochemistry of critical formations (injection and confining zones) and any other relevant formations?*
* *Was any geochemical modeling done to identify major reactions that may occur in either the injection or confining zone? What calculations or models were used? What was the input data? What were the results?*
* *Are geochemical reactions expected to play a significant role in trapping? Cross-reference the AoR plan as applicable.*
* *How is the geochemical data presented in this section representative of the injection and confining zones?]*

*[Associated figures may include:*

* *Tabular baseline fluid chemistry data.*
* *Graphical baseline fluid chemistry data.*
* *Sampling locations and dates.*
* *Maps showing geochemical results in the context of the AoR (if possible).]*

### Other Information (Including Surface Air and/or Soil Gas Data, if Applicable)

*[Please provide a narrative description of any other information that is relevant to the site characterization. If surface air and/or soil gas monitoring is required by the UIC Program Director as part of the Testing and Monitoring Plan, baseline data should be presented in this section.]*

*[Recommended considerations include:*

* *Where any other analyses or assessments of the site conducted to support site characterization? What methods were used? What were the results?*
* *If gas monitoring was conducted to collect baseline data, what methods were used? Why was gas monitoring necessary or requested? What were the results?]*

### Site Suitability [40 CFR 146.83]

*[Please provide a description of how the proposed injection site meets the suitability requirements set forth at 40 CFR 146.83. This demonstration should draw upon and synthesize the site characterization data described above. Please frame this discussion to match the rule requirements, demonstrating that the injection zone can accommodate the total anticipated carbon dioxide volume and that the confining zone has sufficient integrity to contain the proposed injected volume and any displaced fluids.]*

*[Recommended considerations include:*

* *What is the subsurface distribution of lithological facies? What are the implications for carbon dioxide plume migration?*
* *How will carbon dioxide be confined to the injection zone? How do the site characterization data demonstrate the lack of potential leakage pathways?*
* *How will the carbon dioxide stream interact with well materials and subsurface formations (injection and confining zones)?*
* *What is the total storage capacity of the injection zone? How was this determined? How is this sufficient to receive the proposed amount of carbon dioxide?*
* *Are there any potential concerns regarding confining zone integrity? What site characterization data support this determination?*
* *Is secondary confinement necessary to ensure USDW protection? If so, what is the secondary confining zone, what are its characteristics, and how will it prevent the migration of carbon dioxide and displaced fluids into USDWs?]*

## AoR and Corrective Action

*[Please provide a short description of the information and files submitted to the GSDT, with references to the rule requirements those submissions satisfy. If there is additional information that could not be submitted using the forms in the GSDT, it can be included here.*

*Upload your proposed AoR and Corrective Action Plan and provide detailed modeling/well tabulation information using the AoR and Corrective Action module.]*

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| **AoR and Corrective Action GSDT Submissions** |
| ***GSDT Module:*** AoR and Corrective Action  ***Tab(s):***All applicable tabs  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Tabulation of all wells within AoR that penetrate confining zone ***[40 CFR 146.82(a)(4)]***  AoR and Corrective Action Plan ***[40 CFR 146.82(a)(13) and 146.84(b)]***  Computational modeling details ***[40 CFR 146.84(c)]*** |

## Financial Responsibility

*[Please provide a short description of the information and files submitted to the GSDT, with references to the rule requirements those submissions satisfy. If there is additional information that could not be submitted using the forms in the GSDT it can be included here.*

*Submit detailed cost estimate and financial instrument information using the Financial Responsibility Demonstration module.]*

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| **Financial Responsibility GSDT Submissions** |
| ***GSDT Module:*** Financial Responsibility Demonstration  ***Tab(s):***Cost Estimate tab and all applicable financial instrument tabs  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Demonstration of financial responsibility ***[40 CFR 146.82(a)(14) and 146.85]*** |

## Injection Well Construction

*[In this section, provide text, tables, and/or figures to fulfill the injection well construction data requirements for the permit application, listed at 40 CFR 146.82(a)(9), (11), and (12). Also include or attach any other information necessary to demonstrate/establish compliance with the requirements at 40 CFR 146.86.*

*Please state at the start of this section if the proposed injection project is using a new or existing well. If an existing well is being modified for use as a Class VI well, existing materials (e.g., data, schematics, etc.) can be attached and referenced, and submitted information should meet the requirements at 40 CFR 146.81(c).*

***Note: Schematics or other graphics showing the surface and subsurface well construction details are required pursuant to 40 CFR 146.82(a)(11) and should be supplemented with a brief narrative description and/or annotations on the graphic.]***

### Proposed Stimulation Program [40 CFR 146.82(a)(9)]

*[Recommended considerations include:*

* *Is a stimulation program necessary? When will stimulation occur?*
* *What stimulation methods will be used? How will the proposed stimulation methods ensure that no new fractures develop, and that containment will be maintained?*
* *Will any chemicals be added to aid stimulation? Are there any compatibility issues between these chemicals and the injection and confining zones?*
* *What methods were used to determine the maximum safe injection pressure for the stimulation program?]*

### Construction Procedures [40 CFR 146.82(a)(12)]

*[Please provide a brief evaluation of proposed injection well construction procedures, with specific details to demonstrate an understanding of down-hole stresses and the maintenance of mechanical integrity.*

***Note: The Class VI rule at 40 CFR 146.86(b) requires specific information related to well construction materials (casing, cement, tubing, packer). Some of this information may be included in other components of the permit application. Please include cross-references as applicable.]***

*[Recommended considerations include:*

* *How will well construction prevent the movement of fluids into or between USDWs?*
* *How do proposed construction procedures permit the use of testing and monitoring devices, both within the borehole and within the annulus?*
* *What contingency plans are in place to respond to unexpected events during drilling (e.g., excessive deviation, loss of drill string, loss of circulation, cement issues etc.)? What remedial methods will be used to address these issues? How will these methods ensure USDW protection?*
* *What formal standards (e.g., API, ASTM, etc.) apply to the proposed well materials (casing, cement, tubing, packer)?*
* *Are all proposed well materials compatible with the carbon dioxide stream and formation fluids? How was this determined?]*

*Casing and Cementing*

*[In addition to a brief narrative description of proposed casing and cement, please use Table 1 to provide specific details on the proposed casing strings to meet the requirements at 40 CFR 146.86(b)(iv).]*

*[Recommended considerations include:*

* *What is the average down-hole temperature? How will this affect casing and cement performance throughout the life of the project?*
* *Is the structural strength of the proposed casing sufficient for the life of the injection project? Is there any indication that structural strength may decrease over time? How will this be addressed during injection and PISC?*
* *What type of cement will be used? How much? Are there any additives proposed?*
* *What is the cementing procedure? Will cementing occur through staging?*
* *How will the mechanical integrity of the cement and casing be verified? How will this demonstrate that USDWs are not endangered?]*

**Table 1. Casing details.**

| **Casing String** | **Casing Depth Interval and Units** | **Borehole Diameter** | **Wall Thickness** | **External Diameter** | **Casing Material** (e.g., weight/‌grade/‌connection) | **String Weight** |
| --- | --- | --- | --- | --- | --- | --- |
| Conductor |  |  |  |  |  |  |
| Surface |  |  |  |  |  |  |
| Long String |  |  |  |  |  |  |
| *Add other casing types as applicable* |  |  |  |  |  |  |

*Tubing and Packer*

*[Please provide information related to the tubing and packer materials in Table 2. The information in this table meets the minimum requirements at 40 CFR 146.86(c).]*

**Table 2. Tubing and packer details.**

| **Material** | **Setting Depth Interval and Units** | **Tensile Strength** | **Burst Strength** | **Collapse Strength** | **Material** (e.g., weight/‌grade/‌connection) |
| --- | --- | --- | --- | --- | --- |
| Tubing |  |  |  |  |  |
| *Additional materials* |  |  |  |  |  |

## Pre-Operational Logging and Testing

*[Please provide a short description of the information and files submitted to the GSDT, with references to the rule requirements those submissions satisfy. If there is additional information that could not be submitted using the forms in the GSDT it can be included here.*

*Submit your proposed pre-operational testing program using the Pre-Operational Testing module.]*

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| **Pre-Operational Logging and Testing GSDT Submissions** |
| ***GSDT Module:*** Pre-Operational Testing  ***Tab(s):***Welcome tab  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Proposed pre-operational testing program ***[40 CFR 146.82(a)(8) and 146.87]*** |

## Well Operation

*[Provide text, tables, and/or figures to fulfill the operating data requirements for the permit application, listed at 40 CFR 146.82(a)(7) and (10). Also include or attach any other information necessary to demonstrate/establish compliance with the requirements at 40 CFR 146.88. Please use a table like the one below to present the proposed operational information.]*

### Operational Procedures [40 CFR 146.82(a)(10)]

*[Please provide a brief narrative describing the proposed operational procedures. This should supplement the data presented in Table 3 below.*

*Recommended considerations include:*

* *What calculations or methods were used to determine the operational values presented in Table 3?*
* *How do the values for the parameters listed below relate to the critical fracture pressure and other geological and hydrological parameters?*
* *Are operational parameters likely to stay constant for the lifetime of the injection project? What might trigger a change? What changes might be made?]*

### Proposed Carbon Dioxide Stream [40 CFR 146.82(a)(7)(iii) and (iv)]

*[Recommended considerations include:*

* *What is the source(s) of the carbon dioxide stream?*
* *What are the physical and chemical characteristics of the carbon dioxide stream? What methods were used to determine this information?*
* *What is the corrosiveness of the carbon dioxide stream? How will the stream behave under the proposed operational conditions (e.g., down-hole P/T) for the lifetime of the injection project?]*

**Table 3. Proposed operational procedures.**

| **Parameters/Conditions** | **Limit or Permitted Value** | **Unit** |
| --- | --- | --- |
| Maximum Injection Pressure |  |  |
| Surface |  |  |
| Downhole |  |  |
| Average Injection Pressure |  |  |
| Surface |  |  |
| Downhole |  |  |
| Maximum Injection Rate |  |  |
| Average Injection Rate |  |  |
| Maximum Injection Volume and/or Mass |  |  |
| Average Injection Volume and/or Mass |  |  |
| Annulus Pressure |  |  |
| Annulus Pressure/Tubing Differential |  |  |

## Testing and Monitoring

*[Please provide a short description of the information and files submitted to the GSDT, with references to the rule requirements those submissions satisfy. If there is additional information that could not be submitted using the forms in the GSDT it can be included here.*

*Upload your Testing and Monitoring Plan using the Project Plan Submissions module.]*

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| **Testing and Monitoring GSDT Submissions** |
| ***GSDT Module:*** Project Plan Submissions  ***Tab(s):***Testing and Monitoring tab  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Testing and Monitoring Plan ***[40 CFR 146.82(a)(15) and 146.90]*** |

## Injection Well Plugging

*[Please provide a short description of the information and files submitted to the GSDT, with references to the rule requirements those submissions satisfy. If there is additional information that could not be submitted using the forms in the GSDT it can be included here.*

*Upload your Injection Well Plugging Plan using the Project Plan Submission module.]*

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| ***Injection Well Plugging GSDT Submissions*** |
| ***GSDT Module:*** Project Plan Submissions  ***Tab(s):***Injection Well Plugging tab  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Injection Well Plugging Plan ***[40 CFR 146.82(a)(16) and 146.92(b)]*** |

## Post-Injection Site Care (PISC) and Site Closure

*[Please provide a short description of the information and files submitted to the GSDT, with references to the rule requirements those submissions satisfy. If there is additional information that could not be submitted using the forms in the GSDT it can be included here.*

*Please indicate whether you are proposing an alternative PISC timeframe. Upload your PISC and Site Closure Plan using the Project Plan Submission module and, if desired, upload information pertaining to the alternative PISC timeframe demonstration using the Alternative PISC Timeframe Demonstration module.]*

| **PISC and Site Closure GSDT Submissions** |
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| ***GSDT Module:*** Project Plan Submissions  ***Tab(s):***PISC and Site Closure tab  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  PISC and Site Closure Plan ***[40 CFR 146.82(a)(17) and 146.93(a)]*** |
| ***GSDT Module:*** Alternative PISC Timeframe Demonstration  ***Tab(s):***All tabs (only if an alternative PISC timeframe is requested)  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Alternative PISC timeframe demonstration ***[40 CFR 146.82(a)(18) and 146.93(c)]*** |

## Emergency and Remedial Response

*[Please provide a short description of the information and files submitted to the GSDT, with references to the rule requirements those submissions satisfy. If there is additional information that could not be submitted using the forms in the GSDT it can be included here.*

*Upload your Emergency and Remedial Response Plan using the Project Plan Submission module.]*

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| **Emergency and Remedial Response GSDT Submissions** |
| ***GSDT Module:*** Project Plan Submissions  ***Tab(s):*** Emergency and Remedial Response tab  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Emergency and Remedial Response Plan ***[40 CFR 146.82(a)(19) and 146.94(a)]*** |

## Injection Depth Waiver and Aquifer Exemption Expansion

*[If you are requesting an injection depth waiver or an areal expansion of an existing aquifer exemption, indicate that here and provide a short description of the information and files submitted to the GSDT, with references to the rule requirements those submissions satisfy. These items are not official components of the Class VI permit application, but are considered supplemental or associated submissions. Remember that if a depth waiver or aquifer exemption expansion is requested, there will be implications for other components of the permit application (e.g., in the Testing and Monitoring Plan).*

*Submit these items, if desired, using the Injection Depth Waivers and Aquifer Exemption Expansions module.]*

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| **Injection Depth Waiver and Aquifer Exemption Expansion GSDT Submissions** |
| ***GSDT Module:*** Injection Depth Waivers and Aquifer Exemption Expansions  ***Tab(s):*** All applicable tabs  Please use the checkbox(es) to verify the following information was submitted to the GSDT:  Injection Depth Waiver supplemental report ***[40 CFR 146.82(d) and 146.95(a)]***  Aquifer exemption expansion request and data ***[40 CFR 146.4(d) and 144.7(d)]*** |

## Optional Additional Project Information [40 CFR 144.4]

*[The following is a list of Federal laws that may apply prior to the issuance of UIC permits. When any of these laws are applicable, EPA must ensure that they are followed. The optional additional information requested below will assist EPA in its analyses to satisfy these laws.*

* *The Wild and Scenic Rivers Act, 16 U.S.C. 1273 et seq. Identify any national wild and scenic river that may be impacted by the activities associated with the proposed project.*
* *The National Historic Preservation Act of 1966, 16 U.S.C. 470 et seq. Identify properties listed or eligible for listing in the National Register of Historic Places that may be affected by the activities associated with the proposed project. If previous historic and cultural resource survey(s) have been conducted, provide the results of the survey(s).*
* *The Endangered Species Act, 16 U.S.C. 1531 et seq. Identify any endangered or threatened species that may be affected by the activities associated with the proposed project. If a previous endangered or threatened species survey has been conducted, provide the results of the survey.*
* *The Coastal Zone Management Act, 16 U.S.C. 1451 et seq. Identify any coastal zones that may be affected by the activities associated with the proposed project.]*

## Other Information

*[Provide any other information requested by the UIC Program Director, or that is not specifically requested/required but may be useful for the permit application, in this section to fulfill the requirement at 40 CFR 146.82(a)(21). You can also provide information in a separate file or files using the designated field on the Initial Permit Application tab of the Project Information Tracking module.]*