

Coyote Creek Mine
Emergency Lease of Federal Coal
Serial Number: NDM 110277
Supplemental Environmental Assessment
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US Department of the Interior

Office of Surface Mining Reclamation and Enforcement

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Abbreviations and Acronyms

µg	microgram
µg/m ² /yr	micrograms per square meter per year
µg/m ³ /yr	micrograms per cubic meter per year
µg/yr	micrograms per square meter per year
ASLM	Assistant Secretary for Land and Minerals Management
BA	Biological Assessment
BLM	Bureau of Land Management
CCMC	Coyote Creek Mining Company
CCUS	carbon capture, utilization, and storage
CEQ	Council on Environmental Quality
C.F.R.	Code of Federal Regulations
CO _{2e}	carbon dioxide equivalent
°C	degrees centigrade
°F	degrees Fahrenheit
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FLIGHT	Facility Level Information on Greenhouse Gases Tool
FONSI	Finding of No Significant Impact
FWS	U.S. Fish and Wildlife Service
Gt	gigaton
GHG	greenhouse gas
GHRP	Greenhouse Gas Reporting Program
Hg(0)	elemental mercury
Hg(II)	oxidized mercury
Hg-p	particle bound mercury
IWG	Interagency Working Group
IPCC	Intergovernmental Panel on Climate Change
IRA	Inflation Reduction Act of 2022
km	kilometers
L	liter(s)
lb/yr	pounds per year
LBA Tracts	lease area
LBA	lease by application
m ²	square meters
m ³	cubic meters
MeHg	methylmercury
mg/kg	milligrams per kilogram

MLA	Mineral Leasing Act of 1920
MMT	million metric tons
MPDD	mining plan decision document
NADP	National Atmospheric Deposition Program
NCTF	United States National Climate Task Force
NDC	national determined contribution
PSC	North Dakota Public Service Commission
NEPA	National Environmental Policy Act of 1969
ng	nanogram
ng/L	nanograms per liter
OSMRE	Office of Surface Mining Reclamation and Enforcement
PM ₁₀	particulate matter less than 10 microns in size
PSC	Public Service Commission
R2P2	Resource Recovery and Protection Plan
SC-CH ₄	social cost of methane
SC-CO ₂	social cost of carbon dioxide
SC-GHG	social cost of greenhouse gases
SC-N ₂ O	social cost of nitrous oxide
SEA	Supplemental Environmental Assessment
SHPO	State Historic Preservation Office
SMCRA	Surface Mining Control and Reclamation Act
UNEP	United Nations Environment Programme
U.S.C.	United States Code
USDOJ	United States Department of the Interior

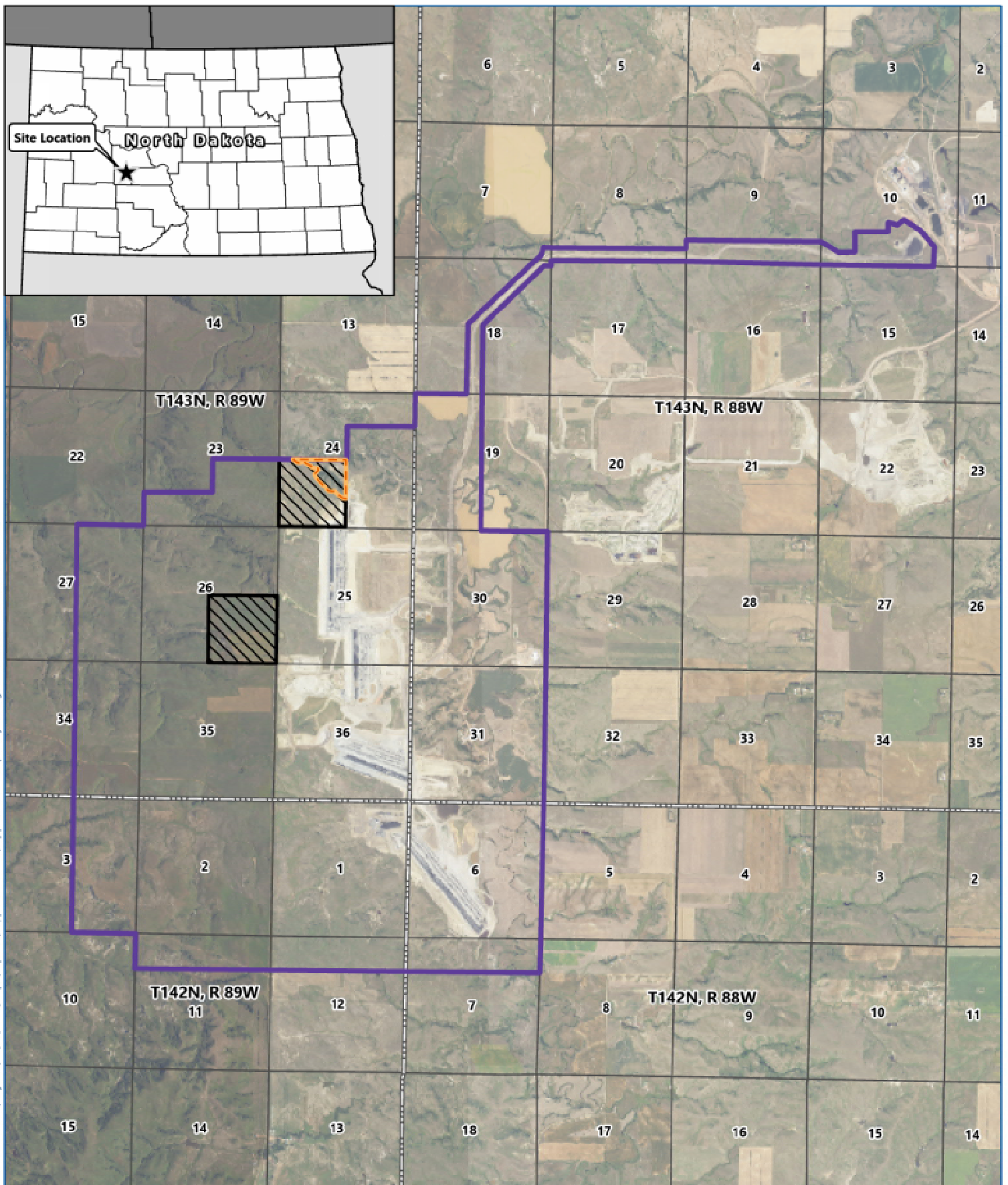
Chapter 1 Introduction






1.1 Introduction

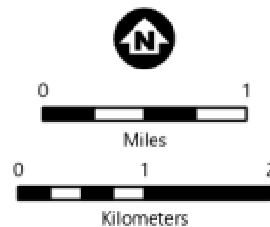
On December 13, 2017, Coyote Creek Mining Company (CCMC) submitted a lease-by-application (LBA) to the Bureau of Land Management's (BLM) Montana/Dakotas State Office for an emergency lease of federal coal to lease two 160-acre tracts of federal coal within the existing permit boundary of the Coyote Creek Mine (<https://eplanning.blm.gov/eplanning-ui/project/114011/570>). The need for an emergency lease sale is consistent with 43 C.F.R. § 3425.1-4 in that if the coal resources are not leased, they would be bypassed in the reasonably foreseeable future, and, if leased, some portion of the federal coal tracts applied for would be used within 3 years.

The delineated area of the federal coal tracts (Figure 1-1) is as follows:

- Fifth Principal Meridian, North Dakota
- SW¼ Section 24, Township 143 North, Range 89 West
- SE¼ Section 26, Township 143 North, Range 89 West
- 284.0 acres in Mercer County, North Dakota



-  CCMC Permit Boundary
-  Federal Tract (NDM 110277)
-  Exclusion Area
-  Public Land Survey Township
-  Public Land Survey Section



GENERAL LOCATION OF THE PROPOSED ACTION
 Coyote Creek Mine
 T143N, R89W
 Mercer County, North Dakota

FIGURE 1-1

Imagery: USDA NAIP (2022)
 Quadrangle: Medicine Butte

Pursuant to sections 503 and 523 of the Surface Mining Control and Reclamation Act of 1977 (SMCRA), the North Dakota Public Service Commission (PSC) is authorized to regulate surface coal mining operations on private, state, and federal lands within North Dakota. *See* 30 C.F.R. part 934. The PSC maintains primacy to enforce performance standards and permit requirements and has authority during environmental emergencies, while the Office of Surface Mining Reclamation and Enforcement (OSMRE) retains oversight responsibilities to ensure that PSC is effectively implementing, administering, enforcing, and maintaining its approved program, as well as certain duties that cannot be delegated to PSC. The OSMRE is the agency responsible for making a recommendation to the United States Department of the Interior (USDOl) Assistant Secretary for Land and Minerals Management (ASLM) to approve, disapprove, or approve with conditions the proposed mining plan required by section 207(c) of the Mineral Leasing Act of 1920, as amended.

The BLM North Dakota Field Office completed an Environmental Assessment (EA) in 2020 that analyzed the environmental impacts of the federal coal lease proposed by Coyote Creek (LBA Tracts). The BLM subsequently issued a Finding of No Significant Impact (FONSI) on July 17, 2020, and issued the federal coal lease on November 1, 2020. The OSMRE Western Region Office and PSC cooperated in preparing the EA (reference (1)). As a federal agency, the OSMRE is subject to the National Environmental Policy Act of 1969 (NEPA) and, therefore, must conduct an environmental review, in the form of either adopting a prior NEPA document for the same project, supplementing a prior NEPA document for the same project, or creating a new NEPA analysis, before proceeding with the federal action of making a recommendation to the ASLM regarding the mining plan. The OSMRE determined a supplement to the prior EA was needed.

The OSMRE also determined that the Proposed Action of mining a new federal coal lease constitutes a mining plan decision requiring approval by the ASLM. Federal coal lease NDM-110277 is the first and only federal coal lease at the Coyote Creek Mine. The OSMRE's decision was based upon consideration of the federal regulations at 30 C.F.R. parts 740 and 746. The OSMRE will develop a mining plan decision document (MPDD) recommendation that will be based on compliance with:

- NEPA
- BLM's Resource Recovery and Protection Plan (R2P2) documentation
- Federal coal lease NDM-110277
- PSC permit findings
- Any documentation ensuring compliance with applicable requirements of other federal laws, regulations, and executive orders, including preparing a Biological Assessment (BA) to assess the potential to affect threatened or endangered species, as well as

proposed and final designated critical habitat that may occur within the designated analysis areas, and fulfill the requirements for consultation with the U.S. Fish and Wildlife Service under Section 7(c) of the Endangered Species Act (ESA) of 1973, and consultation on cultural resources

The affected environment, environmental impacts and mitigation, and cumulative effects analyses for the following elements were addressed in the 2020 EA (reference (1)):

- Air quality
- Climate change
- Water resources
- Federally listed species
- Socioeconomics

The 2020 EA (reference (1)) eliminated the following resources issues from further analysis:

- Cultural: archaeological resources and Native American religious concerns
- Geology and minerals
- Invasive plants, noxious weeds, and vegetation
- Land use and access
- Livestock grazing
- Paleontology
- Soils (physical and biological)
- Plants: non-federally listed or BLM sensitive species
- Wastes
- Migratory birds and raptors
- Wildlife: non-federally listed or BLM sensitive species
- BLM natural areas
- Culturally designated Areas of Critical Environmental Concerns or Special Designation Areas

- National historic trails
- Areas of critical environmental concern
- Wild and scenic rivers
- Wilderness areas, wilderness study areas, or lands with wilderness characteristics
- Environmental justice
- Prime or unique farmlands
- BLM's fuels and fire management areas
- BLM sensitive plants
- Federally listed plant species
- Recreational areas
- Visual resources
- Water rights
- Wild horses and burro's areas
- Fisheries
- Woodlands or forestry

The OSMRE incorporates, by reference, the analyses from the 2020 EA (reference (1)). 40 C.F.R. § 1501.12; 43 C.F.R. § 46.135. The analyses in the 2020 EA that, upon subsequent review, OSMRE determined did not need updating are not discussed further in this Supplemental Environmental Assessment (SEA). The OSMRE prepared this SEA to further assess potential climate change impacts, as well as the anticipated social cost of greenhouse gases (SC-GHG) associated with the approval of the federal mining plan, including the effects when combined with reasonably foreseeable future actions and environmental trends.

The OSMRE prepared this SEA to thoroughly examine the potential environmental impacts of the Proposed Action and No Action Alternatives to support informed decision-making. This SEA is consistent with:

- the purpose and goals of NEPA;
- Council on Environmental Quality's (CEQ) implementing NEPA regulations at 40 C.F.R. parts 1500-1508;

- USDOJ’s NEPA regulations (43 C.F.R. part 46);
- USDOJ Departmental Manual Part 516;
- OSMRE guidance on implementing NEPA, including the OSMRE Handbook on Procedures for Implementing the NEPA (reference (2));
- longstanding federal judicial and regulatory interpretations; and
- administration priorities and policies, including Secretary’s Order No. 3399 requiring bureaus and offices to use “the same application or level of NEPA that would have been applied to a Proposed Action before the 2020 Rule went into effect” (referring to the CEQ’s final rule to revise its NEPA regulations published on July 16, 2020, at 85 Fed. Reg. 43,304-43,376).

NEPA requires federal agencies to consider the potential environmental impacts of proposed federal actions and determine whether significant impacts to the human environment would occur. The term “significant” is discussed in 40 C.F.R. § 1501.3(b). If the OSMRE determines that the project would have significant impacts following the analysis in this SEA, then OSMRE would be required to prepare an Environmental Impact Statement (EIS). If the OSMRE determines that the potential impacts would not be significant, the OSMRE would prepare a FONSI to document this finding, and, accordingly, would not prepare an EIS.

Pursuant to NEPA, as amended, and in accordance with Executive Order 13990 (January 20, 2021), OSMRE has prepared this SEA to update and disclose the assessment of the SC-GHG that could result from the Coyote Creek Mine’s (Coyote Creek) proposed federal mining plan. This assessment serves to monetize the effects of the GHG emissions from Coyote Creek’s ongoing and future operations by valuing the social cost of those emissions as thoroughly, accurately, and transparently as possible, drawing from the best available scientific and economic data and methodologies.

In the 2020 EA (reference (1)), the BLM and OSMRE described the reasonably foreseeable impacts expected to occur as a result of Coyote Creek’s proposal to lease and mine federal coal in federal coal lease NDM-110277 but did not conduct a SC-GHG analysis.

1.2 Background

CCMC is the owner and operator of the Coyote Creek Mine and has been mining coal at the Coyote Creek Mine since 2016. The Coyote Creek Mine typically produces around 2 million tons of lignite coal per year. The maximum production rate approved in the Coyote Creek Mine’s minor source operating permit is 3.2 million tons of lignite coal per year (reference (2)). All the coal from the Coyote Creek Mine is supplied to the Coyote Station coal-fired power plant located adjacent to the northeast corner of the permit area via a half-mile-long conveyor. Lignite power plants are typically constructed next to the mines that supply them due to the high-

moisture content that makes the transportation of lignite coal uneconomic over long distances (reference (4)). Lignite coal has the propensity to spontaneously combust which further reduces the ability to transport the coal over long distance rail routes. As such, there is neither a rail loadout facility at the Coyote Creek Mine nor are there any proximate rail lines that would allow for rail transport of the coal to other end users. The Coyote Station is jointly owned by the Otter Tail Power Company, Northern Municipal Power Agency, Montana-Dakota Utilities Company, and NorthWestern Energy. CCMC is under contract to supply coal to the Coyote Station through 2040.

The federal coal lease NDM 110277 is located within Coyote Creek's permit boundary (Figure 1-1). The BLM issued the lease on November 1, 2020. Permit NACC-1302 was approved in 2014 by the PSC, the regulatory authority authorized by the OSMRE to issue surface coal mining permits. Each federal coal tract comprises federal minerals managed by the BLM and private surface lands.

As required by section 207(c) of the Mineral Leasing Act and 30 C.F.R. § 746.14, the ASLM may approve, approve with conditions, or deny a mining plan based on a recommendation from OSMRE. Because numerous approvals are required to lease and mine federal coal, the 2020 EA was jointly prepared by the BLM Montana/Dakotas State Office and OSMRE. The PSC participated as a cooperating agency due to its special expertise and jurisdiction as the SMCRA regulatory authority for approving and issuing the mining permit.

The 2020 EA analyzed the potential effects on the environment as a result of issuing a federal coal lease for the proposed LBA and approval of the federal mining plan by the ASLM to allow federal coal to be mined. The 2020 EA determined that the potential effects would not be significant, and the BLM issued a FONSI documenting its determination that conducting a lease sale and issuing a federal coal lease would not result in significant environmental effects. The OSMRE prepared this SEA in response to Secretarial Order 3399 (April 2021) - Department-Wide Approach to the Climate Crisis and Restoring Transparency and Integrity to the Decision-Making Process, Executive Order 13990 (January 2021) - Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, and Executive Order 14008 (January 2021) - Tackling the Climate Crisis at Home and Abroad.

1.2.1 Coyote Station

The Coyote Station is not considered a connected action to this Proposed Action. The OSMRE Handbook on Procedures Implementing NEPA defines connected actions as follows:

Connected actions are those actions that are “closely related” and should be analyzed in the same NEPA document...Actions are connected if they automatically trigger other actions that may require an EIS; cannot or will not proceed unless other actions are taken previously or simultaneously; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification.

(reference (3)). The proposed action would not change production levels at the Coyote Station or require changes to its current regulatory permits. If the mining plan is rejected, the Coyote Station would continue to operate and be supplied with coal from other Coyote Creek Mine production areas. The Coyote Station would operate, as needed, independent of the coal in the LBA Tracts. Although the Coyote Station is not considered a connected action, operating data from the power plant are included in this SEA to provide context and to assist with analyzing the reasonably foreseeable future action of combustion of coal sourced from the LBA Tracts.

Regulatory Framework and Necessary Authorizations

The following key laws, as amended, establish the primary authorities, responsibilities, and requirements for developing federal coal resources:

- Mineral Leasing Act of 1920 (MLA)
- National Historic Preservation Act of 1966
- NEPA
- Clean Air Act of 1970
- Clean Water Act of 1972
- Endangered Species Act of 1973
- SMCRA

The SMCRA provides the legal framework for the federal government to regulate coal mining by balancing the need for continued domestic coal production and protecting the environment and society, while also striving to return mined land to beneficial use when mining is finished. The OSMRE implements its responsibilities for the MLA and SMCRA under regulations at 30 C.F.R. §§ 700 through 955.

The SMCRA provides the OSMRE with primary responsibility for administering programs that regulate surface coal mining operations in the United States. Pursuant to section 503 of the SMCRA, 30 U.S.C. § 1253, the PSC developed, and the Secretary of the Interior approved, North Dakota's permanent regulatory program authorizing the PSC to regulate surface coal mining operations on private and state lands within North Dakota. Pursuant to section 523 of SMCRA, 30 U.S.C. § 1273, and 30 C.F.R. § 934.30, the PSC entered into a cooperative agreement with the Secretary of the Interior authorizing the PSC to regulate surface coal mining operations on federal lands within the state. This cooperative agreement does not permit PSC to issue a federal mining plan.

Pursuant to this cooperative agreement, a federal coal leaseholder must submit a permit application package, that includes the R2P2 and state mining permit application, to the OSMRE

and PSC for any proposed coal mining and reclamation operations on federal lands in the state. In general, federal lands include surface ownership and mineral interests, owned by the federal government. 30 U.S.C. § 1291(4). If the permit application complies with the relevant laws and plan, the PSC issues a permit to the applicant to conduct coal-mining operations.

If federal lands are present, the ASLM will then decide whether or not to approve the mining plan and whether or not additional conditions are needed. The ASLM makes this decision after the OSMRE prepares a MPDD in support of its recommendation for approval, disapproval, or approval with conditions. Pursuant to 30 C.F.R. § 746.13, the OSMRE's recommendation will be based on:

- the permit application package, including the R2P2;
- information prepared in compliance with NEPA, including this SEA;
- documentation assuring compliance with the applicable requirements of federal laws, regulations, and executive orders other than NEPA;
- comments and recommendations or concurrence of other federal agencies and the public;
- findings and recommendations of the BLM with respect to the R2P2, federal lease requirements, and the MLA;
- findings and recommendations of the PSC with respect to the permit application and the state program; and
- findings and recommendations of the OSMRE regarding additional requirements of 30 C.F.R. parts 740 through 746.

1.3 Purpose and Need for the Proposed Action

Coyote Creek's purpose and need for the Proposed Action is to mine the approximately 5.23 million tons of minable coal in the LBA Tracts for continued operation of the Coyote Creek Mine. As previously noted, if the 5.23 million tons of federal coal from the LBA Tracts are mined in a continuous manner, it would represent approximately 2 years of coal production at the Coyote Creek Mine at the maximum mining rate of 2.5 million tons per year.

The purpose of OSMRE's federal action is to evaluate Coyote Creek's application for a federal mining plan that is required before the federal coal contained in the federal lease tracts can be mined. The OSMRE must conduct an environmental analysis under NEPA that can inform its recommendation to the ASLM regarding whether to approve, disapprove, or approve with conditions the proposed mining plan, as required by the MLA and the SMCRA and its implementing regulations at 30 C.F.R. part 746; 30 U.S.C. § 207(c). The ASLM will consider the

OSMRE's recommendation to decide whether the mining plan modification is approved, disapproved, or approved with conditions.

1.4 Outreach and Issues Identification

1.4.1 Public Involvement

On October 15, 2018, BLM posted the Proposed Action on its ePlanning website with NEPA number DOI-BLM-MT-0000-2018-0006-EA. A notice of intent to scope for the EA was released by BLM and OSMRE on October 15, 2018, initiating the public scoping period. The BLM and OSMRE carried out a 14-day public scoping period which ended on October 29, 2018. Issues identified through the scoping process that warranted detailed analysis in the 2020 EA are described in Section 1.7 of the 2020 EA (BLM and OSMRE 2020 (reference (1)) for more information on the public involvement). A notice of availability of the 2020 EA was published in the *Federal Register* on May 6, 2020, initiating a 30-day public comment period (reference (4). 85 Fed. Reg. 26,985. The agencies reviewed all public comments, and agency responses to all substantive public comments are included in The Public Comment Report, July 2020.

The OSMRE released the draft SEA and unsigned FONSI on December 7, 2023, for a 30-day public comment period. The OSMRE published notices in the Bismarck Tribune, Beulah Beacon, and Hazen Star as well as mailed public outreach and tribal consultation letters. The public comment period ended January 5, 2024.

The OSMRE received two comment letters during the comment period. The North Dakota Department of Environmental Quality noted:

- the need to minimize fugitive dust
- provided guidelines for minimizing impacts to waterways
- Coyote Creek has existing permits to discharge stormwater and wastewater from its mining activities extend to the LBA Tracts
- reference to air permitting requirements

Sections 3.3.1.2 and 3.4 of the 2020 EA describe air quality and water resources, respectively. As previously noted, the OSMRE incorporates, by reference, the analyses from the 2020 EA (reference (1)) and they are not discussed further in this SEA.

The second comment letter was sent by landowners within the Coyote Creek Mine permit area who noted concerns regarding:

- reclamation standards and requirements

- addition of federal coal reserves to the Coyote Creek Station who is not using carbon capture and sequestration
- the Coyote Creek Mine and Coyote Creek Station should be a single source for air emissions
- federal coal leasing requirements

Mining and reclamation activities would proceed as described in Section 2.4.1. of the 2020 EA. Section 3.3.1.2 of the 2020 EA (reference (1)) describes the air quality permitting requirements for the Coyote Creek Mine (reference (1)). As described in the comment report for the 2020 EA (reference (1)), the BLM reviewed the rules and regulations of an emergency lease sale (43 CFR 3425.1-4) and concluded it meets the standards of an emergency lease sale in that 1) if the coal resources are not leased, they would be bypassed in the reasonably foreseeable future, and 2) if the coal resources are leased, some portion of federal coal tracts applied for would be used within 3 years. BLM issued the federal coal lease NDM 110277 in November 2020. As previously noted, the OSMRE incorporates, by reference, the analyses from the 2020 EA (reference (1)) and they are not discussed further in this SEA.

1.4.2 Tribal and Section 106 Consultation

For the 2020 EA development, BLM and the OSMRE sent letters to the tribal president/chairperson, Tribal Historic Preservation Officer, and other cultural contacts for the following tribes.

- Crow Tribe
- Crow Creek Sioux Tribe
- Cheyenne River Sioux Tribe
- Flandreau Santee Sioux Tribe
- Fort Belknap Indian Community
- Ft. Peck Tribes
- Lower Brule Sioux Tribe
- Three Affiliated Tribes: Mandan, Hidatsa, and Arikara Nation
- Northern Cheyenne Tribe
- Oglala Sioux Tribe

- Rosebud Sioux Tribe
- Sisseton-Wahpeton Oyate Tribes
- Spirit Lake Sioux Tribe
- Standing Rock Sioux Tribe
- Turtle Mountain Band of Chippewa
- Yankton Sioux Tribe

The agencies also contacted tribes via telephone and email to ensure that they sufficiently met all requests for further information.

Sixteen tribes were contacted by mail with known cultural resource information asking them for a review and if they have any additional traditional cultural sites of concern in the proposed lease areas. Follow up emails with additional cultural information were sent and telephone calls were made to seven consulting tribes that have been key in coordinating with BLM on coal projects or who are on reservations that are close to the project area. These tribes include: Three Affiliated Tribe, Mandan, Hidatsa, Arikara Nation (MHAN), Spirit Lake Sioux (ND), Turtle Mountain Chippewa (ND), Rosebud Sioux Tribe (SD), Cheyenne River Sioux Tribe (SD), Standing Rock Sioux Tribe (ND/SD), and Northern Cheyenne Tribe (MT). No additional cultural sites of concern were identified inside the proposed lease area and review of the one homestead site 32ME2431 located inside the lease area was conducted by the Northern Cheyenne Tribe, the Rosebud Sioux Tribe, and by the Three Affiliated Tribe, MHAN.

A finding of no issues for the project was offered by the THPOs for the Northern Cheyenne Tribe and Rosebud Sioux Tribe. The Three Affiliated Tribe, MHAN's compliance officer sent an email stating: "The TAT-THP office concurs with the determination on the site form and has no concern that any cultural properties will be affected."

Based on site surveys and field visits by the agencies, as well as the tribal responses finding no issues for the project, the BLM and the OSMRE made a recommendation of no historic properties affected for leasing the federal coal. Concurrence was met on this determination with the North Dakota State Historic Preservation Office (SHPO) on February 12, 2019, under SHPO Ref: 19-5381 (see reference (1) for more information on the public involvement).

As previously noted, the OSMRE sent letters to all tribal nations with ancestral or aboriginal interest in the project area to invite comment and requests for formal consultation during the public comment period. The OSMRE did not receive comments or requests for formal consultation regarding this project with tribal nations.

1.4.3 U.S. Fish and Wildlife Service Consultation

Section 7 of the ESA requires consultation with the U.S. Fish and Wildlife Service (FWS) for projects requesting federal funding and/or regulatory agency authorization to ensure that the proposed federal action(s) do not jeopardize the continued existence of any threatened, endangered, or proposed species or result in the destruction or adverse modification of designated critical habitat. Barr Engineering Co. prepared a BA on behalf of the OSMRE to support agency coordination with the FWS and compliance with Section 7 of the ESA of 1973, as amended (16 U.S.C. §§ 1531 et seq.) for its MPDD recommendations for the LBA Tracts.

The BA analyzed how mining the LBA Tracts could affect threatened and endangered species and designated critical habitat. Two endangered species and four threatened species were identified as having the potential to occur in the action area (a 50-kilometer [(km)] radius area). The species considered in the BA include the following:

- Dakota skipper (*Hesperia dacotae*), threatened
- Northern long-eared bat (*Myotis septentrionalis*), endangered
- Pallid sturgeon (*Scaphirhynchus albus*), endangered
- Piping plover (*Charadrius melodus*) and its critical habitat, threatened
- Red knot (*Calidris canutus rufa*), threatened
- Whooping crane (*Grus americana*), endangered

The OSMRE conservatively (protectively) determined that the proposed action, may affect, but is not likely to adversely affect the species (and critical habitat) listed above.

The “may affect, but not likely to adversely affect” determination for the Pallid sturgeon, Northern long-eared bat, Piping plover, Red knot, and Whooping crane are based on potential indirect impacts to surface waters, including wetlands and riparian corridors, related to mercury and metal (e.g., selenium) emissions from the Coyote Station burning Coyote Creek Mine coal.

Surveys conducted for portions of the LBA Tracts where mining would occur indicate suitable habitat (Type B) present for the Dakota skipper but no individuals were documented. However, the “may affect, but not likely to adversely affect” determination for the Dakota skipper is conservatively based on the potential for mercury and selenium emissions from the Coyote Station to be contributed to Dakota skipper habitat.

The BA was submitted to the FWS on January 18, 2023, for review and concurrence. The FWS concurred with the OSMRE’s effects determinations on January 24, 2024.

Chapter 2 Description of the Alternatives

2.1 Introduction

Chapter 2 of this SEA incorporates Chapter 2 of the 2020 EA (reference (1)) by reference and only provides additional information regarding climate change and the SC-GHG insofar as it is necessary to the analysis presented in this document. There is a description of the two alternatives that were considered and analyzed in detail (i.e., Alternative A: No Action Alternative and Alternative B: Proposed Action) in Chapter 2 of the 2020 EA. The 2020 EA describes the ongoing mining operations, as well as how the mining operations would continue under both alternative scenarios (i.e., Alternatives A and B). Chapter 2 of this SEA describes the Proposed Action and the No Action Alternative in relationship to the SC-GHG analysis in Chapter 3.

2.2 Proposed Action

The location of the LBA Tracts is detailed in Chapter 1.1 and shown on Figure 1-1. Sections 24 and 26 tracts of the application area (i.e., LBA Tracts [NDM-110277]) are within the permit area of the Coyote Creek Mine (Figure 1-1) that was approved by the PSC (Permits NACC-1302). Coyote Creek submitted a request to the PSC to revise Permit NACC-1302 to include the federal coal tracts in sections 24 and 26. PSC has approved the permit revision to include the leased federal coal but included a condition to the approval requiring federal mining plan approval before the leased federal coal can be mined.

Coyote Creek estimates that there are approximately 5.2 million tons of mineable federal coal located in the LBA Tracts. If the 5.2 million tons are mined continuously, it would represent approximately two years of coal production at the Coyote Creek Mine at a mining rate of 2.5 million tons per year. However, the actual time to produce the coal from the LBA Tracts is expected to be longer than two years. Coyote Creek estimates that mining of the federal coal will occur over the course of 13 years (2023-2035) because the federal coal is blended with private coal as needed to meet the requirements of the mine's contract with Coyote Station. The Coyote Creek Mine projected mine life and operating plans, whether the LBA Tracts are mined or not, extend through the year 2040. The Proposed Action is for the OSMRE to submit an MPDD making a recommendation to the ASLM to approve the MPDD.

Mining and reclamation activities would proceed as described in Section 2.4.1. of the 2020 EA (reference (1)).

2.3 No Action

Under the No Action Alternative, the OSMRE would not recommend approval of the MPDD to the ASLM. Without ASLM's approval, the PSC's proposed permit would revert to the previous permit. Under the previous permit, the federal coal reserves in the LBA Tracts would not be

recovered and mining of private coal would continue in other permitted areas until available coal reserves are mined out in 2040.

Under the No Action Alternative, additional soil removal and stripping would occur on these tracts under the previous state permit in order to support mining the adjoining private coal reserves, as well as additional soil stockpiles being placed on these tracts.

Chapter 3 Affected Environment and Impacts

3.1 Introduction

This chapter describes the existing condition of resources and evaluates climate change and the potential GHGs that could be released by implementing the alternatives described in Chapter 2, as they relate to the MPDD for Coyote Creek Mine. This chapter incorporates Chapter 3 of the 2020 EA by reference and only provides supplemental information regarding climate and GHGs where relevant to the analysis presented in this SEA.

This chapter describes the environmental consequences, including the effects when combined with reasonably foreseeable future actions and environmental trends. “Reasonably foreseeable” means “sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision.” 40 C.F.R. § 1508.1(aa). 40 C.F.R. § 1508.1(g) define “effects or impacts” as:

changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and include the following:

- (1) Direct effects, which are caused by the action and occur at the same time and place.*
- (2) Indirect effects, which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.*
- (3) Cumulative effects, which are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.*
- (4) Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effects will be beneficial.*

3.2 Past, Present, and Reasonably Foreseeable Future Actions

For this analysis, the temporal span of the Proposed Action represents the time during which LBA Tract mining would occur (i.e., 5.2 million tons of coal mined over 13 years). For assessing potential impacts from GHG emissions, including SC-GHG, the geographic extent of the cumulative impacts analysis area is considered at the state, national, and global scales.

Past and present actions in the analysis areas that would contribute to cumulative effects include mining, power plant operations, industrial activities, and agricultural activities. Of these activities, surface mining and the associated electrical power generation dominate the analysis area emissions. In addition to these sources, agriculture, including row crops, hayfields, and grazing lands, is a predominant industry in North Dakota. There is significant oil and gas development in the northwest portion of North Dakota, notably in the Bakken Region. Coyote Creek Mine and Coyote Station lie within the southeastern limit of the Bakken Region.

Therefore, the reasonably foreseeable actions for this analysis consist of potential future federal coal mining at Coyote Creek Mine and coal combustion at the Coyote Station Power Plant.

Mining operations at Beulah, Center, Falkirk, and Freedom Mines are expected to continue for the foreseeable future at current production rates and continued surface disturbances according to individually approved mining plans. The continued operations of the other mines at permitted rates and within their permitted boundaries are not considered a change to existing conditions; therefore, they are not a reasonably foreseeable action.

3.3 Climate Change and Social Cost of Greenhouse Gases

The BLM's 2020 EA presented an analysis regarding the affected environment, environmental impacts and mitigation, and cumulative effects for climate (reference (1)). This Section provides an updated climate analysis in addition to SC-GHGs.

Table 3-1 summarizes the direct and indirect GHG emissions from the mining and combustion of the 5.2 million tons of mineable federal coal located in the LBA Tracts based on the emissions presented in the BLM 2020 EA (reference (1)). Table 3-1 assumes GHG emission global warming potentials published by the Intergovernmental Panel on Climate Change (IPCC) in 2014 (reference (5)).

Table 3-1 Proposed Action Summary for Potential GHG Emissions from Mining LBA Tracts and Coal Combusted at Coyote Station

Parameter Description	Proposed Action
Total Federal Coal Combusted (million tons)	5.2
Number of Years in Operation (years)	2
Annual Federal Coal Combusted (tons)	2,600,000
Cumulative 100-year CO ₂ e Mining Emissions (million tons CO ₂ e)	8.3
Annual 100-year CO ₂ e Mining Emissions (million tons CO ₂ e/year)	0.08
Annual 100-year CO ₂ e Mining Emissions (metric tons CO ₂ e/year)	7,497,748
Cumulative 100-year CO ₂ e Coal Combustion Emissions (million tons CO ₂ e)	7.3
Annual 100-year CO ₂ e Coal Combustion Emissions (million tons CO ₂ e/year)	0.07
Annual 100-year CO ₂ e Coal Combustion Emissions (metric tons CO ₂ e/year)	6,640,032

From reference (1)

3.3.1 Trends in Global, United States, and North Dakota Greenhouse Gas Emissions

3.3.1.1 Emission Levels

Preliminary estimates from the Rhodium Group for 2020 show global emissions at 50.1 gigatons (Gt) of carbon dioxide equivalents (CO₂e), representing a 4.4% decline from 2019 levels, by far the largest drop in recorded history. The reduction in emissions in 2020 was primarily due to the COVID-19 pandemic and global recession. In 2020, China accounted for nearly 30% of all global emissions, the United States accounted for approximately 10% of global GHG emissions, while India and the European Union accounted for 6% each. In 2019 (the latest year for which there is sufficient data to provide sectoral level detail), GHGs were emitted across the following primary economic sectors globally: industry (30%); electric power generation (26%); land use, agriculture, and waste (21%); transportation (16%); and buildings (7%) (reference (6)). The Proposed Action's (mining and combustion) annual emissions represent approximately 0.0024% of 2020 global annual GHG emissions.

GHG emissions in the United States are tracked by the Environmental Protection Agency (EPA) through two complementary programs. First is the *Inventory of U.S. Greenhouse Gases and Sinks*, which is the annual GHG emissions inventory published by EPA that represents all United States emissions (reference (7)). The second is the Greenhouse Gas Reporting Program (GHGRP), which generally applies to facilities that emit more than 25,000 million metric tons (MMT) of CO₂e each year. The facility level emissions reported under GHGRP are published through the Facility Level Information on Greenhouse Gases Tool (FLIGHT). EPA estimates that the FLIGHT data reported by large emitters reflect 85% to 90% of the total U.S. emissions (reference (8)).

In 2020, total gross United States GHG emissions were 5,981 MMT CO₂e, and net emissions were 5,222 MMT CO₂e. Net GHG emissions include both anthropogenic and natural emissions of GHGs as well as removals by sinks (e.g., carbon uptake by forests). From 2005 to 2020, net GHG emissions in the United States declined 21%. This decline reflects the combined impacts of long-term trends in population and economic growth, energy markets, and technological changes, including energy efficiency, and energy fuel choices. Net GHG emissions decreased from 2019 to 2020 by 11%. The primary driver for the decrease was an 11% decrease in CO₂ emissions from fossil fuel combustion, primarily due to a 13% decrease in transportation emissions and a 10% decrease in electric power sector emissions, reflecting both a decrease in demand from the COVID-19 pandemic and a continued shift from coal to less carbon intensive natural gas and renewables. Carbon dioxide (CO₂) is the primary GHG contributing to total United States emissions, accounting for 79% of the total GHG emissions in 2020. By comparison, methane (CH₄) accounted for 11%, nitrous oxide (N₂O) accounted for 7% of emissions and fluorinated gases accounted for nearly 3% of emissions. In 2020, GHGs were emitted across the following primary economic sectors in the U.S.: transportation (27%), electric power/electricity generation (25%), industry (24%), agriculture (11%) residential homes (7%), and commercial businesses (6%). (reference (7)) The Proposed Action's (mining and combustion) annual emissions represent approximately 0.02% of 2018 net annual U.S. GHG emissions. (reference (9a)).

In 2021, total North Dakota GHG emissions were 36.9 MMT CO₂e. GHGs were emitted across the following primary economic sectors in the North Dakota: electric power/electricity generation (76%), chemical producers (10%), petroleum and natural gas systems (6%) mineral mining (3%), refineries (2%), waste management (2%), and other sources (2%). (reference (8)). The Proposed Action's (mining and combustion) annual emissions represent approximately 20% of 2020 annual North Dakota GHG emissions.

Federal lands are responsible for GHG emissions from certain activities, such as fossil fuel extraction and combustion, as well as carbon sequestration, which is the process of capturing and storing atmospheric carbon dioxide through uptake into soils, vegetation, aquatic environments, and other ecosystems (biologic sequestration) or through injection into porous underground rock formations (geologic sequestration). The United States Geological Survey has estimated GHG emissions and carbon sequestration on federal lands for the 10-year period from 2005 to 2014 (reference (9)). GHG emissions (when considering just CO₂) associated with the combustion and extraction of fossil fuels from United States' federal lands increased from 1,362 MMT CO₂e in 2005, to 1,429 MMT CO₂e in 2010, and then decreased to 1,279 MMT CO₂e in 2014. CH₄ and N₂O emissions from federal lands also decreased over the same 10-year period. When the federal lands' fossil fuel extraction and combustion emissions are combined with ecosystem emissions and sequestration estimates, the annual net carbon emissions from federal lands within the conterminous United States (48 contiguous states) ranged from 683 to 783.5 MMT CO₂e from 2005 to 2014, indicating a net carbon emission from federal lands within the conterminous

United States. The annual net carbon emissions from North Dakota ranged from 2.5 to 12.4 MMT CO_{2e} from 2005 to 2014, indicating a net carbon emission from North Dakota federal lands (reference (9)). The Proposed Action's (mining and combustion) annual emissions represent approximately 60% of North Dakota's federal lands 2014 emissions, and 0.96% of national federal lands 2014 emissions.

The BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends presents the estimated emissions of GHGs attributable to fossil fuels produced on lands and mineral estate managed by the BLM. More specifically, the report estimates GHG emissions from coal, oil, and gas development that is occurring, and is projected to occur, on the federal onshore mineral estate. BLM estimated a total of 448.30 MMT CO_{2e} from all coal production on federal lands in 2021 and 42.44 MMT CO_{2e} from all coal production on federal lands in North Dakota in 2021 (reference (10)). The Proposed Action's annual emissions represent approximately 1.67% of national 2021 federal coal emissions, and 17.7% of North Dakota's 2021 federal coal emissions.

3.3.1.2 Emission Goals

The IPCC *Special Report Global Warming of 1.5°C* estimates with high confidence that to limit global warming to 1.5 degrees centigrade (°C), global GHG emissions in 2030 would need to be 40% to 50% lower than 2010 emissions (reference (11)). Based on the IPCC findings, the United Nations Environment Programme (UNEP) Emissions Gap Report estimates global GHG emissions in 2030 would need to be 55% lower than currently projected 2030 emissions in order to limit global warming to 1.5°C and would need to be 30% lower in order to limit warming to 2°C (reference (12)). The Paris Agreement is a legally binding international climate change treaty designed to encourage individual countries to pledge specific emissions reductions so that the world can meet the necessary GHG reduction levels to limit global warming to 1.5°C (reference (13)). Unfortunately, UNEP has estimated that emission reduction pledges from individual nations are anticipated to reduce projected 2030 emissions by only 7.5%, falling far short of the 55% reduction needed to limit global warming to 1.5°C (reference (12)). Therefore, global temperatures are anticipated to continue to rise well above levels necessary to avoid the worst impacts from climate change.

The United States National Climate Task Force (NCTF) was established on January 27, 2021, by the *Executive Order on Tackling the Climate Crisis at Home and Abroad* (EO 14008). EO 14008 was issued to facilitate the organization and deployment of a government-wide approach to combat the climate crisis (reference (14)). The NCTF performed an analysis of potential and measured impacts of various policies and measures (both potential and existing) at all levels of government and in all relevant sectors to develop the United States national determined contribution (NDC) under the Paris Agreement. This analysis was conducted using input from all federal government agencies as well as other stakeholders, such as scientists, activists, local and state governments, and various local institutions. For the industrial sector, the NDC outlines that the United States government will support research on and implementation of very low- and

zero-carbon industrial processes and products, including introducing these products to market. The United States government will also incentivize carbon capture, utilization, and storage (CCUS) and the use of new sources of hydrogen for powering industrial facilities (reference (15)).

The United States NDC established an economy-wide target of reducing net GHG emissions by 50% to 52% below 2005 levels in 2030 (reference (15)). The United States has also established the goal of net-zero emissions no later than 2050 and 100% carbon pollution-free electricity by 2035 (references (16); (17)). In 2020, United States net GHG emissions totaled 5,222 MMT CO_{2e}, representing a 21% emissions reduction below 2005 level (reference (7)). The United States is broadly on-track to meet the 2025 goal of 26% to 28% emissions reductions below 2005 levels (reference (15)). On August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 (IRA) into law, which is the single largest action ever taken by the United States government to combat climate change. The IRA included several additional economic incentives to support the development of CCUS (reference (18)). However, it should be acknowledged that at this time, CCUS is not yet adequately developed or deployed to fully mitigate all GHGs associated with electricity generation from coal. According to analysis from the Rhodium Group, the net result of all the provisions in the IRA is anticipated to help United States net GHG emissions decline to 32-42% below 2005 levels in 2030, which represents a substantial step towards its goals, but still short of the climate target of 50-52% below 2005 levels in 2030 (reference (19))

The net United States emissions in 2005 were 6,635 MMT CO_{2e} (reference (15)); therefore, the 2030 net emissions goals are estimated to be between approximately 3,185 and 3,318 MMT CO_{2e}. Comparing the 2020 net GHG emissions of 5,222 MMT CO_{2e} to the low end of the 2030 estimated emissions of 3,185 MMT CO_{2e} shows that annual net United States GHG emissions must be reduced by 2,037 MMT CO_{2e} between 2020 and 2030. Under the Proposed Action, 8.2 MMT CO_{2e} would be emitted annually from 2023 to 2030, representing approximately 0.4% of the necessary emissions reduction of 2,037 MMT CO_{2e} to meet the 2030 emissions goals. To meet the goal of 100% carbon pollution-free electricity by 2035, annual U.S. GHG emissions from the electric power/electricity generation sector must be reduced by 1,305.5 MMT CO_{2e} between 2020 and 2035. Under the Proposed Action 8.2 MMT CO_{2e} would be emitted annually from 2030 to 2034, this represents approximately 0.6% of the necessary emissions reduction of 1,305.5 MMT CO_{2e} to meet the 2035 100% carbon pollution-free electricity goal. Under the Proposed Action 8.2 MMT CO_{2e} would be emitted in 2035, these emissions would prohibit reaching the 100% carbon pollution-free electricity goal by 2035.

North Dakota does not currently have formal GHG emission targets (reference (20)).

3.3.1.3 Carbon Budget

The United States does not currently have a carbon budget with which to compare the Proposed Action's potential emissions. While a global carbon budget does exist, a comparison of the Proposed Action's emissions to the global carbon budget would not be useful given the relative size of the global carbon budget. However, we are including a discussion of the global carbon budget for background. The global carbon budget is an estimate for the total amount of anthropogenic CO₂ that can be emitted to have a certain chance of limiting the global average temperature increase to below 2°C (3.6 degrees Fahrenheit [°F]) relative to preindustrial levels. IPCC estimates that if cumulative global CO₂ emissions from 1870 onwards are limited to approximately 1,000 Gt of carbon (3,670 Gt CO₂), then the probability of limiting the temperature increase to below 2°C (3.6°F) is greater than 66 percent (reference (21)). Since this IPCC report was published, various studies have produced differing estimates of the remaining global carbon budget; some estimates have been larger (reference (22)) and others have been smaller (reference (23)). Most notably, the IPCC Sixth Assessment Report (reference (24)) detailed the implications of methodological advancements in estimating the remaining carbon budget. The report concluded that, due to a variety of factors, estimates for limiting warming to 2°C (3.6°F) are about 11 to 14 Gt of carbon (40 to 50 Gt CO₂) higher than estimates in the IPCC Fifth Assessment Report (reference (21)). In other words, the global carbon budget presented in IPCC Sixth Assessment Report was slightly larger than would have been expected based on the Fifth Assessment Report global carbon budget. Estimates of the remaining global carbon budget vary depending on a range of factors, such as the assumed conditions and the climate model used (reference (25)). Because of underlying uncertainties and assumptions, no one number for the remaining global carbon budget can be considered definite.

Using IPCC's estimated carbon budget in the Sixth Assessment Report, as of 2019, approximately 655 Gt of carbon (2,403 Gt CO₂) of this budget has already been emitted, leaving a remaining global budget of 358 Gt of carbon (1,313 Gt CO₂) (reference (24)). The emissions reductions needed to keep global emissions within this carbon budget would require dramatic reductions in all United States sectors, as well as, from the rest of the world. Even with the full implementation of global emissions reduction commitments to date, global emissions in 2030 would still be roughly 11 Gt CO_{2e} higher than what is consistent with a scenario that limits warming to 2°C [3.6°F] from preindustrial levels (reference (12)).

3.3.2 Social Cost of Greenhouse Gases

The social cost of carbon (SC-CO₂), social cost of nitrous oxide (SC-N₂O), and social cost of methane (SC-CH₄) – together, the SC-GHG are estimates of the monetized damages associated with incremental increases in GHG emissions in a specific year.

On January 20, 2021, President Biden issued E.O. 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis* (reference (24)). Section 1 of

E.O. 13990 establishes an Administration policy to, among other things, listen to the science; improve public health and protect our environment; ensure access to clean air and water; reduce GHG emissions; and bolster resilience to the impacts of climate change (reference (26)). Section 2 of the E.O. calls for federal agencies to review existing regulations and policies issued between January 20, 2017, and January 20, 2021, for consistency with the policy articulated in the E.O. and to take appropriate action.

Consistent with E.O. 13990, the CEQ rescinded its 2019 *Draft National Environmental Policy Act Guidance on Considering Greenhouse Gas Emissions* and issued interim *National Environmental Policy Act Guidance on Federal Consideration of Greenhouse Gas Emissions and Climate Change* (2023 GHG Guidance) on January 9, 2023 (reference (26)). CEQ issued the 2023 GHG Guidance as interim guidance so that agencies may use it immediately to assess GHG emissions and climate change effects while they seek public comment on the guidance (reference (28)).

Regarding the use of social cost of carbon or other monetized costs and benefits of GHGs, the 2023 GHG Guidance noted that NEPA does not require monetizing costs and benefits (reference (27)). It also noted that “the weighing of the merits and drawbacks of the various alternatives need not be displayed using a monetary cost-benefit analysis and should not be when there are important qualitative considerations” (reference (27)).

Section 5 of E.O. 13990 emphasized that federal agencies should “capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account” and established an Interagency Working Group (IWG) on the Social Cost of Greenhouse Gases ([reference (26)]). In February 2021, the IWG published *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates under Executive Order 13990* (reference (28)). This is an interim report that updated previous guidance from 2016.

In accordance with this direction, Sections 3.3.2 and 3.3.3 provide estimates of the monetary value of changes in GHG emissions that could result from selecting each alternative. Such analysis should not be construed to mean a cost determination is necessary to address potential impacts of GHGs associated with specific alternatives. These numbers were monetized; however, they neither constitute a complete cost-benefit analysis nor present a direct comparison with other impacts analyzed in this document. For instance, the OSMRE’s overall analysis for this action does not monetize most of the major costs or benefits and does not include all revenue streams from the Proposed Action. SC-GHG is provided only as a useful measure of the benefits of GHG emissions reductions to inform agency decision-making.

For federal agencies, the best currently available estimates of the SC-GHG are the interim estimates of the social cost of carbon dioxide (SC-CO₂), SC-CH₄, and SC-N₂O developed by the IWG on the SC-GHG. Select estimates are published in the Technical Support Document

(reference (28)) and the complete set of annual estimates are available on the Office of Management and Budget's website (reference (29)).

The IWG's SC-GHG estimates are based on complex models describing how GHG emissions affect global temperatures, sea level rise, and other biophysical processes; how these changes affect society through, for example, agricultural, health, or other effects; and monetary estimates of the market and nonmarket values of these effects. One key parameter in the models is the discount rate, which is used to estimate the present value of the stream of future damages associated with emissions in a particular year. A higher discount rate assumes that future benefits or costs are more heavily discounted than benefits or costs occurring in the present (i.e., future benefits or costs are a less significant factor in present-day decisions). The current set of interim estimates of SC-GHG have been developed using three different annual discount rates: 2.5%, 3%, and 5% (reference (28)).

As expected with such a complex model, there are multiple sources of uncertainty inherent in the SC-GHG estimates. Some sources of uncertainty relate to physical effects of GHG emissions, human behavior, future population growth and economic changes, and potential adaptation (reference (28)). To better understand and communicate the quantifiable uncertainty, the IWG method generates several thousand estimates of the social cost for a specific gas, emitted in a specific year, with a specific discount rate. These estimates create a frequency distribution based on different values for key uncertain climate model parameters. The shape and characteristics of that frequency distribution demonstrate the magnitude of uncertainty relative to the average or expected outcome.

To further address uncertainty, the IWG recommends reporting four SC-GHG estimates in any analysis. Three of the SC-GHG estimates reflect the average damages from the multiple simulations at each of the three discount rates. The fourth value represents higher-than-expected economic impacts from climate change. Specifically, it represents the 95th percentile of damages estimated, applying a 3% annual discount rate for future economic effects. This is a low probability, but high damage scenario, and represents an upper bound of damages within the 3% discount rate model. The estimates in Sections 3.3.3 and 3.3.4 follow the IWG recommendations. Detailed calculations are presented in Appendix A.

3.3.3 Proposed Action

For the Proposed Action, Coyote Creek estimates that approximately 5.2 million tons of mineable federal coal are in the LBA Tracts. If the 5.2 million tons are mined continuously, it would represent approximately two years of coal production at Coyote Creek Mine at a mining rate of 2.5 million tons per year. However, because the federal coal will not be mined all at one time, the actual time to produce coal from the LBA Tracts is estimated to be 13 years. Coyote Creek Mine's projected mine life and operating plans, whether the LBA Tract is mined or not, extend through the year 2040, so the estimated GHG emission rates for the continued operations

at Coyote Creek Mine or Coyote Station would be unchanged by the Proposed Action. Therefore, Table 3-2 only summarizes the direct and indirect GHG emissions from mining and combusting 5.2 million tons of mineable federal coal in the LBA Tracts, based on the emissions presented in this SEA.

Because (as noted above) lignite coal is difficult to transport, the Coyote Creek Mine is not connected to a rail line, and Coyote Creek Mine sells all of its coal to the Coyote Station; and because CCMC's purpose in seeking the OSMRE's approval is to facilitate a more efficient mining and reclamation plan, not to increase the supply of its marketable coal for sale, the OSMRE is confident, based on the data before it, that the Proposed Action would not result in increased sales of coal from Coyote Creek Mine (and associated GHG emissions) over and above the No Action Alternative.

Table 3-2 summarizes the SC-GHGs associated with estimated emissions from the Proposed Action. These estimates represent the present value (from the perspective of 2023) of future market and nonmarket costs associated with CO₂, CH₄, and N₂O emissions. Estimates are calculated based on IWG estimates of social cost per metric ton of emissions for a given emissions year (reference (28)) and the OSMRE's estimates of emissions in each year. They are rounded to the nearest \$1,000. The estimates assume emissions would start in 2023 and end in 2035, based on the current mining plan.

The OSMRE notes that the Proposed Action does not implicate "perfect substitution" of the type discouraged under NEPA. *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*, 88 Fed. Reg. 1196, 1205 & fn. 96, 97 (Jan. 9, 2023). Mining of the LBA Tracts may lower marginal costs for the mine, which may be passed on to the Coyote Station and ultimately result in increased coal combustion, which could in turn lead to higher emissions. Likewise, mining the LBA Tracts may lower certain emissions associated with mining by allowing the mine to operate more efficiently. However, these changes are speculative and difficult to quantify.

Table 3-2 SC-GHGs Associated with Mining LBA Tracts and Coal Combustion under the Proposed Action

Social Cost Metric	5% Average Discount Rate	3% Average Discount Rate	2.5% Average Discount Rate	3% Average Discount Rate, 95th Percentile
SC-CO₂	\$119,174,612	\$403,624,711	\$596,311,132	\$1,206,688,498
SC-CH₄	\$625,230	\$1,355,113	\$1,764,181	\$3,578,724
SC-N₂O	\$801,062	\$2,461,983	\$3,591,300	\$6,481,649
Total	\$120,600,904	\$407,441,806	\$601,666,612	\$1,216,748,872

3.3.4 No Action

Under the No Action Alternative, the OSMRE would not recommend approval of the MPDD to the ASLM. Without ASLM's approval, the PSC's approved permits would revert to the previous permits. Under the previous permits, the federal coal reserves in the LBA Tracts would not be recovered and mining would continue in other permitted areas until 2040. Mining the federal coal would not occur, and the specific emissions associated with the federal coal would not occur. However, under the No Action Alternative the 5.2 million tons of federal coal described in the Proposed Action would be replaced on a one-to-one basis with private coal that has been previously leased to the Coyote Creek Mine. Mining the equivalent 5.2 million tons of mineable non-federal coal would occur at the existing rate of 2.5 million tons per year in other permitted areas. Coyote Station would continue to combust coal from other Coyote Creek Mine production areas at current rates, independent of the coal in the LBA Tracts, until 2040. Coyote Station would operate, as needed, independent of the coal in the LBA Tracts. Further, if the federal mining plan is approved as described in the Proposed Action, then the 5.2 million tons of federal coal would be mined and combusted, but the mine would not mine the equivalent amount of private coal at a later time because that amount of private coal is not needed for the mine to be able to supply Coyote Station until the current life of mine estimate of 2040. Therefore, the No Action Alternative would not change the estimated GHG emission rates for existing conditions. Table 3-3 summarizes the direct and indirect SC-GHG associated with the continued operations at Coyote Creek Mine or Coyote Station under the No Action Alternative.

Table 3-3 Estimated Social Cost of GHG for the No Action Alternative of Coal Combusted at an Electric Generating Utility

Social Cost Metric	5% Average Discount Rate	3% Average Discount Rate	2.5% Average Discount Rate	3% Average Discount Rate, 95th Percentile
SC-CO ₂	\$119,174,612	\$403,624,711	\$596,311,132	\$1,206,688,498
SC-CH ₄	\$625,230	\$1,355,113	\$1,764,181	\$3,578,724
SC-N ₂ O	\$801,062	\$2,461,983	\$3,591,300	\$6,481,649
Total	\$120,600,904	\$407,441,806	\$601,666,612	\$1,216,748,872

Estimated SC-GHG costs for the No Action Alternative (Table 3-3) and the Proposed Action (Table 3-2) are identical because mining rate, direct mining equipment emissions, and indirect coal combustion rate at Coyote Station are the same for both alternatives. Therefore, the Proposed Action does not result in an incremental direct or indirect increase in the SC-GHGs from the No Action Alternative.

3.3.4.1 Unavoidable Adverse, Irretrievable, and Irreversible Effects

The Coyote Creek Mine does not currently employ any CCUS technology, and there are no permit requirements to employ CCUS or reduce GHG emissions through other means; therefore, GHG emissions from the Proposed Action and their contribution to cumulative GHG levels and climate change are unavoidable and irretrievable throughout the life of the mine. Cumulative climate change impacts may be irreversible, depending on what future steps are taken to address future cumulative GHG emissions worldwide (i.e., if the world is unable to limit GHG emissions, some climate change impacts may be irreversible). Impacts on the long-term sustainability of area resources is dependent on the steps taken by the international community to limit GHG emissions (e.g., long-term sustainability of hydrologic resources will depend on the degree to which climate change induces drought and/or flooding which depends on the degree to which the planet warms which is directly related to the degree to which the international community does or does not limit GHG emissions).

3.3.4.2 Conclusion

CCMC would haul coal from the LBA Tracts in trucks via a direct corridor passing through undisturbed areas and the Permit NACC-1302 area to the Coyote Station's coal crushing facility (Section 1.2.1). The coal is then transported from the crushing facility to Coyote Station via conveyor. The Coyote Station has current operating permits, with the ability to renew every 5 years, and the Coyote Creek Mine is anticipated to operate through the permitted lifetime of the Coyote Station. The Coyote Creek Mine has non-federal coal leases sufficient to supply the Coyote Station through 2040. While the Coyote Creek Mine could supply the Coyote Station with non-federal coal sources, CCMC has applied to mine coal within federal leases because this would make for a more efficient mine plan. The Coyote Creek Mine is expected to have a maximum mining rate of 2.6 million tons per year and a life of mine through 2040, regardless of whether the Proposed Action is approved or not (Section 1.2). As such, annual GHG emissions from the Proposed Action will be approximately the same as emissions under the No Action Alternative. Therefore, regardless of whether the Proposed Action is approved or not, average annual emissions (primarily indirect) are expected to be approximately, 0.0024% of 2020 global emissions, 0.02% of 2018 United States net emissions, 20% of 2021 North Dakota emissions, 60% of North Dakota's federal lands 2014 emissions, 0.96% of 2014 national federal lands emissions, 1.67% of national 2021 federal coal emissions, and 17.7% of North Dakota's 2021 federal coal emissions. Additionally, the Proposed Action does not result in an incremental increase in the SC-GHG from the No Action Alternative.

The global carbon budget is discussed in Section 3.3.1.3. The United States does not currently have a carbon budget with which to compare this project's potential emissions, however, as discussed in Section 3.3.1.3, the United States has set specific emissions reduction goals. Under the Proposed Action, 8.2 MMT CO_{2e} would be emitted annually from 2023 to 2040, representing approximately 0.4% of the necessary emissions reduction of 2,037 MMT CO_{2e} to

meet the 2030 emissions goals. The EPA has not set specific thresholds for GHG emissions. Disapproving the Proposed Action would not reduce global emissions in any meaningful way because the No Action Alternative has a very similar emissions profile. Therefore, while climate change does significantly impact the environment and the Proposed Action would produce climate changing emissions, there is no indication that the amount of GHG emissions from the Proposed Action as compared to the No Action Alternative would have a significant impact on climate change.

Chapter 4 List of Preparers

Table 4-1 and Table 4-2 identify the OSMRE staff and consultants used in the preparation of this SEA.

Table 4-1 List of Preparers

Organization	Name	Title / Project Responsibility
OSMRE	Logan Sholar	Natural Resource Specialist / Project Manager, internal scoping, review of Supplemental EA
OSMRE	Charlie Kwak	Environmental Protection Specialist, review of Supplemental EA

Table 4-2 Consultants

Organization	Name	Title / Project Responsibility
Barr Engineering Co.	Amanda Gravseth	Senior Chemical Engineer / Project Manager, Supplemental EA author
Barr Engineering Co.	Bernardo Garza	Senior NEPA Consultant, Supplemental EA author
Barr Engineering Co.	Lisa Ungar	Senior Administrative Assistant, review of Supplemental EA
Barr Engineering Co.	Rachael Shetka	Vice President / Project Principal, review of Supplemental EA

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Appendix A

Social Cost of Greenhouse Gases Calculations

Appendix A Social Cost of Greenhouse Gases Calculations

Year	5.0%_CO ₂	3.0%_CO ₂	2.5%_CO ₂	3% 95th Pct._CO ₂	5.0%_CH ₄	3.0%_CH ₄	2.5%_CH ₄	3% 95th Pct._CH ₄	5.0%_N ₂ O	3.0%_N ₂ O	2.5%_N ₂ O	3% 95th Pct._N ₂ O
2020	14.476	51.082	76.421	151.608	665.688	1485.078	1953.209	3906.371	5779.426	18405.298	27130.806	48255.974
2021	14.964	52.15	77.727	155.119	692.917	1532.015	2008.649	4034.779	5981.4	18842.379	27687.532	49463.691
2022	15.453	53.219	79.033	158.629	720.147	1578.952	2064.09	4163.187	6183.373	19279.46	28244.259	50671.409
2023	15.942	54.287	80.339	162.139	747.376	1625.89	2119.53	4291.595	6385.347	19716.542	28800.985	51879.127
2024	16.431	55.355	81.645	165.65	774.605	1672.827	2174.97	4420.003	6587.321	20153.623	29357.712	53086.844
2025	16.919	56.423	82.951	169.16	801.834	1719.764	2230.41	4548.41	6789.294	20590.704	29914.439	54294.562
2026	17.408	57.491	84.257	172.67	829.063	1766.701	2285.851	4676.818	6991.268	21027.785	30471.165	55502.279
2027	17.897	58.56	85.563	176.181	856.292	1813.639	2341.291	4805.226	7193.242	21464.867	31027.892	56709.997
2028	18.386	59.628	86.869	179.691	883.521	1860.576	2396.731	4933.634	7395.215	21901.948	31584.618	57917.715
2029	18.874	60.696	88.175	183.201	910.75	1907.513	2452.171	5062.042	7597.189	22339.029	32141.345	59125.432
2030	19.363	61.764	89.481	186.712	937.979	1954.45	2507.612	5190.45	7799.163	22776.11	32698.071	60333.15
2031	19.947	62.908	90.844	190.535	972.355	2009.824	2571.507	5344.225	8046.879	23268.02	33309.463	61692.265
2032	20.53	64.052	92.207	194.359	1006.731	2065.198	2635.403	5498.001	8294.595	23759.929	33920.854	63051.381
2033	21.114	65.196	93.57	198.183	1041.107	2120.572	2699.299	5651.776	8542.311	24251.838	34532.245	64410.496
2034	21.697	66.34	94.934	202.006	1075.483	2175.946	2763.195	5805.552	8790.027	24743.748	35143.636	65769.611
2035	22.281	67.484	96.297	205.83	1109.859	2231.32	2827.091	5959.327	9037.743	25235.657	35755.028	67128.727
2036	22.864	68.628	97.66	209.654	1144.235	2286.694	2890.986	6113.103	9285.459	25727.567	36366.419	68487.842
2037	23.448	69.772	99.023	213.477	1178.611	2342.068	2954.882	6266.878	9533.175	26219.476	36977.81	69846.958
2038	24.031	70.916	100.387	217.301	1212.987	2397.441	3018.778	6420.653	9780.891	26711.385	37589.202	71206.073
2039	24.615	72.06	101.75	221.124	1247.363	2452.815	3082.674	6574.429	10028.607	27203.295	38200.593	72565.188
2040	25.199	73.204	103.113	224.948	1281.739	2508.189	3146.569	6728.204	10276.323	27695.204	38811.984	73924.304
2041	25.845	74.35	104.449	228.448	1319.241	2564.102	3209.556	6872.909	10566.545	28224.594	39456.17	75348.507
2042	26.491	75.496	105.785	231.947	1356.743	2620.014	3272.542	7017.614	10856.768	28753.983	40100.356	76772.71
2043	27.137	76.642	107.12	235.447	1394.244	2675.927	3335.528	7162.319	11146.991	29283.373	40744.542	78196.914
2044	27.783	77.788	108.456	238.947	1431.746	2731.839	3398.515	7307.023	11437.213	29812.763	41388.727	79621.117
2045	28.429	78.933	109.792	242.447	1469.247	2787.751	3461.501	7451.728	11727.436	30342.152	42032.913	81045.32
2046	29.076	80.079	111.128	245.946	1506.749	2843.664	3524.487	7596.433	12017.659	30871.542	42677.099	82469.524
2047	29.722	81.225	112.464	249.446	1544.25	2899.576	3587.474	7741.138	12307.881	31400.932	43321.285	83893.727
2048	30.368	82.371	113.799	252.946	1581.752	2955.489	3650.46	7885.842	12598.104	31930.321	43965.471	85317.93
2049	31.014	83.516	115.135	256.445	1619.253	3011.401	3713.446	8030.547	12888.327	32459.711	44609.656	86742.134
2050	31.66	84.662	116.471	259.945	1656.755	3067.314	3776.432	8175.252	13178.549	32989.101	45253.842	88166.337
2051	32.349	85.857	117.855	263.593	1697.036	3126.505	3842.777	8328.179	13489.648	33545.582	45927.063	89663.937
2052	33.053	87.068	119.255	267.293	1738.297	3186.839	3910.287	8483.966	13808.092	34111.451	46610.299	91186.975
2053	33.772	88.297	120.672	271.044	1780.561	3248.336	3978.983	8642.667	14134.052	34686.864	47303.699	92735.884
2054	34.507	89.543	122.106	274.848	1823.852	3311.021	4048.886	8804.337	14467.708	35271.985	48007.414	94311.103
2055	35.258	90.807	123.556	278.706	1868.196	3374.915	4120.018	8969.032	14809.240	35866.975	48721.598	95913.078
2056	36.026	92.088	125.024	282.618	1913.618	3440.042	4192.399	9136.807	15158.834	36472.002	49446.407	97542.265

Year	5.0%_CO ₂	3.0%_CO ₂	2.5%_CO ₂	3% 95th Pct._CO ₂	5.0%_CH ₄	3.0%_CH ₄	2.5%_CH ₄	3% 95th Pct._CH ₄	5.0%_N ₂ O	3.0%_N ₂ O	2.5%_N ₂ O	3% 95th Pct._N ₂ O
2057	36.810	93.388	126.510	286.584	1960.145	3506.425	4266.051	9307.720	15516.681	37087.235	50181.999	99199.125
2058	37.611	94.706	128.013	290.606	2007.803	3574.090	4340.997	9481.831	15882.975	37712.847	50928.533	100884.129
2059	38.429	96.042	129.534	294.685	2056.619	3643.061	4417.260	9659.198	16257.917	38349.011	51686.174	102597.754
2060	39.265	97.398	131.073	298.821	2106.622	3713.362	4494.863	9839.884	16641.709	38995.907	52455.085	104340.487
2061	40.120	98.772	132.630	303.015	2157.841	3785.021	4573.829	10023.949	17034.562	39653.715	53235.436	106112.822
2062	40.993	100.166	134.206	307.268	2210.306	3858.062	4654.183	10211.458	17436.688	40322.619	54027.395	107915.263
2063	41.885	101.580	135.800	311.580	2264.046	3932.512	4735.948	10402.473	17848.307	41002.807	54831.135	109748.319
2064	42.797	103.013	137.414	315.953	2319.092	4008.399	4819.150	10597.063	18269.643	41694.468	55646.833	111612.513
2065	43.728	104.467	139.046	320.388	2375.477	4085.751	4903.813	10795.292	18700.925	42397.797	56474.666	113508.371
2066	44.680	105.941	140.698	324.884	2433.233	4164.595	4989.964	10997.229	19142.389	43112.990	57314.813	115436.433
2067	45.652	107.436	142.370	329.444	2492.393	4244.961	5077.628	11202.943	19594.274	43840.248	58167.460	117397.245
2068	46.646	108.952	144.061	334.068	2552.992	4326.878	5166.832	11412.506	20056.826	44579.773	59032.790	119391.363
2069	47.661	110.490	145.773	338.756	2615.064	4410.375	5257.603	11625.989	20530.297	45331.774	59910.994	121419.354
2070	48.698	112.049	147.505	343.511	2678.645	4495.484	5349.969	11843.465	21014.945	46096.459	60802.262	123481.792

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 Social Cost estimates for emissions years beyond 2050 are estimated using an annual growth rate equal to the average annual growth in social cost estimates for the last five years of available estimates from the TSD (2046-2050)

Social Cost of Carbon Dioxide Calculator

Base Year: 2021 (The Base Year is often the current year and can be no later than the first year of emissions.)

Year 1: 2022 (First year of emissions)

Year of emissions	CO ₂ emissions (metric tons) ¹	Per ton SC-CO ₂ Value (2020\$/metric ton CO ₂) ^{2,3} Average, 5%	Per ton SC-CO ₂ Value (2020\$/metric ton CO ₂) ^{2,3} Average, 3%	Per ton SC-CO ₂ Value (2020\$/metric ton CO ₂) ^{2,3} Average, 2.5%	Per ton SC-CO ₂ Value (2020\$/metric ton CO ₂) ^{2,3} 95th Percentile, 3%	Present Value (in Base Year) of Estimated SC-CO ₂ by emissions year (2020\$) ⁴ Average, 5%	Present Value (in Base Year) of Estimated SC-CO ₂ by emissions year (2020\$) ⁴ Average, 3%	Present Value (in Base Year) of Estimated SC-CO ₂ by emissions year (2020\$) ⁴ Average, 2.5%	Present Value (in Base Year) of Estimated SC-CO ₂ by emissions year (2020\$) ⁴ 95th Percentile, 3%
2022		\$15	\$53	\$79	\$159	\$0	\$0	\$0	\$0
2023	3,681,297	\$16	\$54	\$80	\$162	\$53,231,047	\$188,374,534	\$281,500,706	\$562,618,280
2024	3,681,297	\$16	\$55	\$82	\$166	\$52,251,275	\$186,485,891	\$279,099,331	\$558,059,575
2025		\$17	\$56	\$83	\$169	\$0	\$0	\$0	\$0
2026		\$17	\$57	\$84	\$173	\$0	\$0	\$0	\$0
2027		\$18	\$59	\$86	\$176	\$0	\$0	\$0	\$0
2028		\$18	\$60	\$87	\$180	\$0	\$0	\$0	\$0
2029		\$19	\$61	\$88	\$183	\$0	\$0	\$0	\$0
2030		\$19	\$62	\$89	\$187	\$0	\$0	\$0	\$0
2031		\$20	\$63	\$91	\$191	\$0	\$0	\$0	\$0
2032		\$21	\$64	\$92	\$194	\$0	\$0	\$0	\$0
2033		\$21	\$65	\$94	\$198	\$0	\$0	\$0	\$0
2034		\$22	\$66	\$95	\$202	\$0	\$0	\$0	\$0
2035		\$22	\$67	\$96	\$206	\$0	\$0	\$0	\$0
2036		\$23	\$69	\$98	\$210	\$0	\$0	\$0	\$0
2037		\$23	\$70	\$99	\$213	\$0	\$0	\$0	\$0
2038		\$24	\$71	\$100	\$217	\$0	\$0	\$0	\$0
2039		\$25	\$72	\$102	\$221	\$0	\$0	\$0	\$0
2040		\$25	\$73	\$103	\$225	\$0	\$0	\$0	\$0
2041		\$26	\$74	\$104	\$228	\$0	\$0	\$0	\$0
2042		\$26	\$75	\$106	\$232	\$0	\$0	\$0	\$0
2043		\$27	\$77	\$107	\$235	\$0	\$0	\$0	\$0
2044		\$28	\$78	\$108	\$239	\$0	\$0	\$0	\$0
2045		\$28	\$79	\$110	\$242	\$0	\$0	\$0	\$0
2046		\$29	\$80	\$111	\$246	\$0	\$0	\$0	\$0
2047		\$30	\$81	\$112	\$249	\$0	\$0	\$0	\$0
2048		\$30	\$82	\$114	\$253	\$0	\$0	\$0	\$0
2049		\$31	\$84	\$115	\$256	\$0	\$0	\$0	\$0
2050		\$32	\$85	\$116	\$260	\$0	\$0	\$0	\$0
2051		\$32	\$86	\$118	\$264	\$0	\$0	\$0	\$0
2052		\$33	\$87	\$119	\$267	\$0	\$0	\$0	\$0
2053		\$34	\$88	\$121	\$271	\$0	\$0	\$0	\$0
2054		\$35	\$90	\$122	\$275	\$0	\$0	\$0	\$0
2055		\$35	\$91	\$124	\$279	\$0	\$0	\$0	\$0
2056		\$36	\$92	\$125	\$283	\$0	\$0	\$0	\$0
2057		\$37	\$93	\$127	\$287	\$0	\$0	\$0	\$0
2058		\$38	\$95	\$128	\$291	\$0	\$0	\$0	\$0
2059		\$38	\$96	\$130	\$295	\$0	\$0	\$0	\$0
2060		\$39	\$97	\$131	\$299	\$0	\$0	\$0	\$0
2061		\$40	\$99	\$133	\$303	\$0	\$0	\$0	\$0
2062		\$41	\$100	\$134	\$307	\$0	\$0	\$0	\$0
2063		\$42	\$102	\$136	\$312	\$0	\$0	\$0	\$0
2064		\$43	\$103	\$137	\$316	\$0	\$0	\$0	\$0
2065		\$44	\$104	\$139	\$320	\$0	\$0	\$0	\$0
2066		\$45	\$106	\$141	\$325	\$0	\$0	\$0	\$0
2067		\$46	\$107	\$142	\$329	\$0	\$0	\$0	\$0
2068		\$47	\$109	\$144	\$334	\$0	\$0	\$0	\$0
2069		\$48	\$110	\$146	\$339	\$0	\$0	\$0	\$0
2070		\$49	\$112	\$148	\$344	\$0	\$0	\$0	\$0
2071		\$49	\$112	\$148	\$344	\$0	\$0	\$0	\$0

Annual Discount Rates	Average, 5%	Average, 3%	Average 2.5%	95th Percentile, 3%
Present Value (in Base Year) of Estimated SC-CO₂ for all CO₂ emissions, 2020\$)	\$105,482,322	\$374,860,425	\$560,600,037	\$1,120,677,855

- 1 Annual GHG Estimates from Air Resource Specialist,
- 2 Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide, Interim Estimates under E.O. 13990. Interagency Working Group on Social Cost of Carbon, United States Government. February 2021.
- 3 Social Cost estimates for emissions years beyond 2050 are estimated using an annual growth rate equal to the average annual growth in social cost estimates for the last five years of available estimates from the TSD (2046-2050)
- 4 The SCC estimates from the IWG represent the present value of damages from that year's emissions discounted back to the year of emissions. These columns take that value and discount to the base year in order to facilitate the total NPV calculation.

Social Cost of Methane Calculator

Base Year: 2021 (The Base Year is often the current year and can be no later than the first year of emissions.)

Year 1: 2022 (First year of emissions)

Year of emissions	CH ₄ emissions (metric tons) ¹	Per ton SC-CH ₄ Value (2020\$/metric ton CH ₄) ^{2,3} Average, 5%	Per ton SC-CH ₄ Value (2020\$/metric ton CH ₄) ^{2,3} Average, 3%	Per ton SC-CH ₄ Value (2020\$/metric ton CH ₄) ^{2,3} Average 2.5%	Per ton SC-CH ₄ Value (2020\$/metric ton CH ₄) ^{2,3} 95th Percentile, 3%	Present Value (in Base Year) of Estimated SC-CH ₄ by emissions year (2020\$) ⁴ Average, 5%	Present Value (in Base Year) of Estimated SC-CH ₄ by emissions year (2020\$) ⁴ Average, 3%	Present Value (in Base Year) of Estimated SC-CH ₄ by emissions year (2020\$) ⁴ Average 2.5%	Present Value (in Base Year) of Estimated SC-CH ₄ by emissions year (2020\$) ⁴ 95th Percentile, 3%
2022		\$720	\$1,579	\$2,064	\$4,163	\$0	\$0	\$0	\$0
2023	411	\$747	\$1,626	\$2,120	\$4,292	\$278,614	\$629,881	\$829,151	\$1,662,594
2024	411	\$775	\$1,673	\$2,175	\$4,420	\$275,014	\$629,189	\$830,087	\$1,662,466
2025		\$802	\$1,720	\$2,230	\$4,548	\$0	\$0	\$0	\$0
2026		\$829	\$1,767	\$2,286	\$4,677	\$0	\$0	\$0	\$0
2027		\$856	\$1,814	\$2,341	\$4,805	\$0	\$0	\$0	\$0
2028		\$884	\$1,861	\$2,397	\$4,934	\$0	\$0	\$0	\$0
2029		\$911	\$1,908	\$2,452	\$5,062	\$0	\$0	\$0	\$0
2030		\$938	\$1,954	\$2,508	\$5,190	\$0	\$0	\$0	\$0
2031		\$972	\$2,010	\$2,572	\$5,344	\$0	\$0	\$0	\$0
2032		\$1,007	\$2,065	\$2,635	\$5,498	\$0	\$0	\$0	\$0
2033		\$1,041	\$2,121	\$2,699	\$5,652	\$0	\$0	\$0	\$0
2034		\$1,075	\$2,176	\$2,763	\$5,806	\$0	\$0	\$0	\$0
2035		\$1,110	\$2,231	\$2,827	\$5,959	\$0	\$0	\$0	\$0
2036		\$1,144	\$2,287	\$2,891	\$6,113	\$0	\$0	\$0	\$0
2037		\$1,179	\$2,342	\$2,955	\$6,267	\$0	\$0	\$0	\$0
2038		\$1,213	\$2,397	\$3,019	\$6,421	\$0	\$0	\$0	\$0
2039		\$1,247	\$2,453	\$3,083	\$6,574	\$0	\$0	\$0	\$0
2040		\$1,282	\$2,508	\$3,147	\$6,728	\$0	\$0	\$0	\$0
2041		\$1,319	\$2,564	\$3,210	\$6,873	\$0	\$0	\$0	\$0
2042		\$1,357	\$2,620	\$3,273	\$7,018	\$0	\$0	\$0	\$0
2043		\$1,394	\$2,676	\$3,336	\$7,162	\$0	\$0	\$0	\$0
2044		\$1,432	\$2,732	\$3,399	\$7,307	\$0	\$0	\$0	\$0
2045		\$1,469	\$2,788	\$3,462	\$7,452	\$0	\$0	\$0	\$0
2046		\$1,507	\$2,844	\$3,524	\$7,596	\$0	\$0	\$0	\$0
2047		\$1,544	\$2,900	\$3,587	\$7,741	\$0	\$0	\$0	\$0
2048		\$1,582	\$2,955	\$3,650	\$7,886	\$0	\$0	\$0	\$0
2049		\$1,619	\$3,011	\$3,713	\$8,031	\$0	\$0	\$0	\$0
2050		\$1,657	\$3,067	\$3,776	\$8,175	\$0	\$0	\$0	\$0
2051		\$1,697	\$3,127	\$3,843	\$8,328	\$0	\$0	\$0	\$0

Year of emissions	CH ₄ emissions (metric tons) ¹	Per ton SC-CH ₄ Value (2020\$/metric ton CH ₄) ^{2,3} Average, 5%	Per ton SC-CH ₄ Value (2020\$/metric ton CH ₄) ^{2,3} Average, 3%	Per ton SC-CH ₄ Value (2020\$/metric ton CH ₄) ^{2,3} Average 2.5%	Per ton SC-CH ₄ Value (2020\$/metric ton CH ₄) ^{2,3} 95th Percentile, 3%	Present Value (in Base Year) of Estimated SC-CH ₄ by emissions year (2020\$) ⁴ Average, 5%	Present Value (in Base Year) of Estimated SC-CH ₄ by emissions year (2020\$) ⁴ Average, 3%	Present Value (in Base Year) of Estimated SC-CH ₄ by emissions year (2020\$) ⁴ Average 2.5%	Present Value (in Base Year) of Estimated SC-CH ₄ by emissions year (2020\$) ⁴ 95th Percentile, 3%
2052		\$1,738	\$3,187	\$3,910	\$8,484	\$0	\$0	\$0	\$0
2053		\$1,781	\$3,248	\$3,979	\$8,643	\$0	\$0	\$0	\$0
2054		\$1,824	\$3,311	\$4,049	\$8,804	\$0	\$0	\$0	\$0
2055		\$1,868	\$3,375	\$4,120	\$8,969	\$0	\$0	\$0	\$0
2056		\$1,914	\$3,440	\$4,192	\$9,137	\$0	\$0	\$0	\$0
2057		\$1,960	\$3,506	\$4,266	\$9,308	\$0	\$0	\$0	\$0
2058		\$2,008	\$3,574	\$4,341	\$9,482	\$0	\$0	\$0	\$0
2059		\$2,057	\$3,643	\$4,417	\$9,659	\$0	\$0	\$0	\$0
2060		\$2,107	\$3,713	\$4,495	\$9,840	\$0	\$0	\$0	\$0
2061		\$2,158	\$3,785	\$4,574	\$10,024	\$0	\$0	\$0	\$0
2062		\$2,210	\$3,858	\$4,654	\$10,211	\$0	\$0	\$0	\$0
2063		\$2,264	\$3,933	\$4,736	\$10,402	\$0	\$0	\$0	\$0
2064		\$2,319	\$4,008	\$4,819	\$10,597	\$0	\$0	\$0	\$0
2065		\$2,375	\$4,086	\$4,904	\$10,795	\$0	\$0	\$0	\$0
2066		\$2,433	\$4,165	\$4,990	\$10,997	\$0	\$0	\$0	\$0
2067		\$2,492	\$4,245	\$5,078	\$11,203	\$0	\$0	\$0	\$0
2068		\$2,553	\$4,327	\$5,167	\$11,413	\$0	\$0	\$0	\$0
2069		\$2,615	\$4,410	\$5,258	\$11,626	\$0	\$0	\$0	\$0
2070		\$2,679	\$4,495	\$5,350	\$11,843	\$0	\$0	\$0	\$0
2071		\$2,679	\$4,495	\$5,350	\$11,843	\$0	\$0	\$0	\$0

Annual Discount Rates	Average, 5%	Average, 3%	Average 2.5%	95th Percentile, 3%
Present Value (in Base Year) of Estimated SC-CH ₄ for all CH ₄ emissions, 2020\$)	\$553,627	\$1,259,070	\$1,659,238	\$3,325,059

1 Annual GHG Estimates from Air Resource Specialist.

2 Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide, Interim Estimates under E.O. 13990. Interagency Working Group on Social Cost of Carbon, United States Government. February 2021.

3 Social Cost estimates for emissions years beyond 2050 are estimated using an annual growth rate equal to the average annual growth in social cost estimates for the last five years of available estimates from the TSD (2046-2050)

Social Cost of Nitrous Oxide Calculator

Base Year: 2021 (The Base Year is often the current year and can be no later than the first year of emissions.)

Year 1: 2022 (First year of emissions)

Year of emissions	N2O emissions (metric tons) ¹	Per ton SC-N2O Value (2020\$/metric ton N2O) ^{2,3} Average, 5%	Per ton SC-N2O Value (2020\$/metric ton N2O) ^{2,3} Average, 3%	Per ton SC-N2O Value (2020\$/metric ton N2O) ^{2,3} Average 2.5%	Per ton SC-N2O Value (2020\$/metric ton N2O) ^{2,3} 95th Percentile, 3%	Development and Operations Present Value (in Base Year) of Estimated SC-N2O by emissions year (2020\$) ⁴ Average, 5%	Development and Operations Present Value (in Base Year) of Estimated SC-N2O by emissions year (2020\$) ⁴ Average, 3%	Development and Operations Present Value (in Base Year) of Estimated SC-N2O by emissions year (2020\$) ⁴ Average 2.5%	Development and Operations Present Value (in Base Year) of Estimated SC-N2O by emissions year (2020\$) ⁴ 95th Percentile, 3%
2022		\$6,183	\$19,279	\$28,244	\$50,671	\$0	\$0	\$0	\$0
2023	62	\$6,385	\$19,717	\$28,801	\$51,879	\$359,085	\$1,152,253	\$1,699,618	\$3,031,865
2024	62	\$6,587	\$20,154	\$29,358	\$53,087	\$352,803	\$1,143,492	\$1,690,216	\$3,012,083
2025		\$6,789	\$20,591	\$29,914	\$54,295	\$0	\$0	\$0	\$0
2026		\$6,991	\$21,028	\$30,471	\$55,502	\$0	\$0	\$0	\$0
2027		\$7,193	\$21,465	\$31,028	\$56,710	\$0	\$0	\$0	\$0
2028		\$7,395	\$21,902	\$31,585	\$57,918	\$0	\$0	\$0	\$0
2029		\$7,597	\$22,339	\$32,141	\$59,125	\$0	\$0	\$0	\$0
2030		\$7,799	\$22,776	\$32,698	\$60,333	\$0	\$0	\$0	\$0
2031		\$8,047	\$23,268	\$33,309	\$61,692	\$0	\$0	\$0	\$0
2032		\$8,295	\$23,760	\$33,921	\$63,051	\$0	\$0	\$0	\$0
2033		\$8,542	\$24,252	\$34,532	\$64,410	\$0	\$0	\$0	\$0
2034		\$8,790	\$24,744	\$35,144	\$65,770	\$0	\$0	\$0	\$0
2035		\$9,038	\$25,236	\$35,755	\$67,129	\$0	\$0	\$0	\$0
2036		\$9,285	\$25,728	\$36,366	\$68,488	\$0	\$0	\$0	\$0
2037		\$9,533	\$26,219	\$36,978	\$69,847	\$0	\$0	\$0	\$0
2038		\$9,781	\$26,711	\$37,589	\$71,206	\$0	\$0	\$0	\$0
2039		\$10,029	\$27,203	\$38,201	\$72,565	\$0	\$0	\$0	\$0
2040		\$10,276	\$27,695	\$38,812	\$73,924	\$0	\$0	\$0	\$0
2041		\$10,567	\$28,225	\$39,456	\$75,349	\$0	\$0	\$0	\$0
2042		\$10,857	\$28,754	\$40,100	\$76,773	\$0	\$0	\$0	\$0
2043		\$11,147	\$29,283	\$40,745	\$78,197	\$0	\$0	\$0	\$0
2044		\$11,437	\$29,813	\$41,389	\$79,621	\$0	\$0	\$0	\$0
2045		\$11,727	\$30,342	\$42,033	\$81,045	\$0	\$0	\$0	\$0
2046		\$12,018	\$30,872	\$42,677	\$82,470	\$0	\$0	\$0	\$0
2047		\$12,308	\$31,401	\$43,321	\$83,894	\$0	\$0	\$0	\$0
2048		\$12,598	\$31,930	\$43,965	\$85,318	\$0	\$0	\$0	\$0
2049		\$12,888	\$32,460	\$44,610	\$86,742	\$0	\$0	\$0	\$0
2050		\$13,179	\$32,989	\$45,254	\$88,166	\$0	\$0	\$0	\$0
2051		\$13,490	\$33,546	\$45,927	\$89,664	\$0	\$0	\$0	\$0

Year of emissions	N2O emissions (metric tons) ¹	Per ton SC-N2O Value (2020\$/metric ton N2O) ^{2,3} Average, 5%	Per ton SC-N2O Value (2020\$/metric ton N2O) ^{2,3} Average, 3%	Per ton SC-N2O Value (2020\$/metric ton N2O) ^{2,3} Average 2.5%	Per ton SC-N2O Value (2020\$/metric ton N2O) ^{2,3} 95th Percentile, 3%	Development and Operations Present Value (in Base Year) of Estimated SC-N2O by emissions year (2020\$) ⁴ Average, 5%	Development and Operations Present Value (in Base Year) of Estimated SC-N2O by emissions year (2020\$) ⁴ Average, 3%	Development and Operations Present Value (in Base Year) of Estimated SC-N2O by emissions year (2020\$) ⁴ Average 2.5%	Development and Operations Present Value (in Base Year) of Estimated SC-N2O by emissions year (2020\$) ⁴ 95th Percentile, 3%
2052		\$13,808	\$34,111	\$46,610	\$91,187	\$0	\$0	\$0	\$0
2053		\$14,134	\$34,687	\$47,304	\$92,736	\$0	\$0	\$0	\$0
2054		\$14,468	\$35,272	\$48,007	\$94,311	\$0	\$0	\$0	\$0
2055		\$14,809	\$35,867	\$48,722	\$95,913	\$0	\$0	\$0	\$0
2056		\$15,159	\$36,472	\$49,446	\$97,542	\$0	\$0	\$0	\$0
2057		\$15,517	\$37,087	\$50,182	\$99,199	\$0	\$0	\$0	\$0
2058		\$15,883	\$37,713	\$50,929	\$100,884	\$0	\$0	\$0	\$0
2059		\$16,258	\$38,349	\$51,686	\$102,598	\$0	\$0	\$0	\$0
2060		\$16,642	\$38,996	\$52,455	\$104,340	\$0	\$0	\$0	\$0
2061		\$17,035	\$39,654	\$53,235	\$106,113	\$0	\$0	\$0	\$0
2062		\$17,437	\$40,323	\$54,027	\$107,915	\$0	\$0	\$0	\$0
2063		\$17,848	\$41,003	\$54,831	\$109,748	\$0	\$0	\$0	\$0
2064		\$18,270	\$41,694	\$55,647	\$111,613	\$0	\$0	\$0	\$0
2065		\$18,701	\$42,398	\$56,475	\$113,508	\$0	\$0	\$0	\$0
2066		\$19,142	\$43,113	\$57,315	\$115,436	\$0	\$0	\$0	\$0
2067		\$19,594	\$43,840	\$58,167	\$117,397	\$0	\$0	\$0	\$0
2068		\$20,057	\$44,580	\$59,033	\$119,391	\$0	\$0	\$0	\$0
2069		\$20,530	\$45,332	\$59,911	\$121,419	\$0	\$0	\$0	\$0
2070		\$21,015	\$46,096	\$60,802	\$123,482	\$0	\$0	\$0	\$0
2071		\$21,015	\$46,096	\$60,802	\$123,482	\$0	\$0	\$0	\$0
Annual Discount Rates						Average, 5%	Average, 3%	Average 2.5%	95th Percentile, 3%
Present Value (in Base Year) of Estimated SC-N₂O for all N₂O emissions, 2020\$)						\$711,889	\$2,295,745	\$3,389,834	\$6,043,948

Total for all GHGs	\$106,747,838	\$378,415,240	\$565,649,109	\$1,130,046,863
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1 Annual GHG Estimates from Air Resource Specialist.
 2 Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide, Interim Estimates under E.O. 13990. Interagency Working Group on Social Cost of Carbon, United States Government. February 2021.
 3 Social Cost estimates for emissions years beyond 2050 are estimated using an annual growth rate equal to the average annual growth in social cost estimates for the last five years of available estimates from the TSD (2046-2050)
 4 The SCC estimates from the IWG represent the present value of damages from that year's emissions discounted back to the year of emissions. These columns take that value and discount to the base year in order to facilitate the total NPV calculation.

Appendix B

Public Comment Responses

Appendix B Public Comment Responses

Commentor	Comment	OSMRE Response to Comment
<p>L. David Glatt (North Dakota Department of Environmental Quality)</p>	<p>All necessary measures must be taken to minimize fugitive dust emissions created during construction activities. Any complaints that arise are to be dealt with in an efficient and effective manner.</p>	<p>Section 3.3.1.2 of the 2020 EA (reference (1)) describes the fugitive dust control measures required for Coyote Creek. Furthermore, Coyote Creek developed and implements a fugitive dust control plan to comply with air quality permit condition requirements. As previously noted, the OSMRE incorporates by reference the air quality analysis from the 2020 EA, and it is not discussed further in this SEA.</p>
<p>L. David Glatt (North Dakota Department of Environmental Quality)</p>	<p>Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.</p>	<p>Section 3.4 of the 2020 EA (reference (1)) assesses the potential for impacts to water resources. Coyote Creek would implement sediment control measures established within the NDPSC-issued SMCRA permit that would minimize impacts to the downstream surface water features outside the disturbance area. As previously noted, the OSMRE incorporates by reference the water resources analyses from the 2020 EA, and they are not discussed further in this SEA.</p>
<p>L. David Glatt (North Dakota Department of Environmental Quality)</p>	<p>Coyote Creek Mining Company currently has North Dakota Pollutant Discharge Elimination System (NPDES) permits to discharge stormwater and wastewater from its mining activities. Mining of the Federal coal tracts would be subject to the conditions of the permits in accordance with state rules and policies.</p>	<p>Comment noted. In addition, Section 3.4 of the 2020 EA (reference (1)) assesses the potential for impacts to water resources. As previously noted, the OSMRE incorporates by reference the water resources analyses from 2020 EA, and they are not discussed further in this SEA.</p>
<p>L. David Glatt (North Dakota Department of Environmental Quality)</p>	<p>The proposed project appears to have the potential to be a source of emissions to the air capable of causing or contributing to air pollution and may be required to have an Air Pollution Control Permit to Construct/Operate as required by Chapter 33.1-15-14 of the North Dakota Air Pollution Control Rules. The applicant should contact the department’s Air Pollution Control Program at 701-328-5188 prior to commencing construction.</p>	<p>Section 3.3.1.2 of the 2020 EA (reference (1)) describes that the Proposed Action does not require a new or modified air quality permit. As previously noted, the OSMRE incorporates by reference the air quality analysis from the 2020 EA, and it is not discussed further in this SEA.</p>
<p>Casey and Julie Voight</p>	<p>It has become apparent that the North Dakota Public Service Commission is using “policy memos” in order to relax reclamation standards and requirements for replacement of suitable plant growth material, as is reflected in a recent complaint brought to the ND PSC by the Voigts (see Complaint of Casey and Julie Voigt with Exhibits in Public Service Commission Case No. RC-23-348). The use of such “policy memos” as a replacement for submitting and obtaining approval from OSMRE for amended regulations should not be tolerated.</p>	<p>Mining and reclamation activities would proceed as described in Section 2.4.1. of the 2020 EA (reference (1)). As noted in the public comment report, the 2020 EA was written with the assumption that all terms and conditions of the federal coal lease, as well as the NDPSC mine permits and federal mining plan, will be implemented as required. The NDPSC inspects the mine at least partially each month and fully each quarter to enforce compliance with the state mining laws. BLM also conducts inspections quarterly to enforce compliance with the terms and conditions of the lease. To the extent that NDPSC discovers a violation of its state mining laws, its enforcement program will require remedial action by the mine operator to abate the violation. In the event that a mine operator proposes a revision to their existing mining permit, the NDPSC would process the proposed revision per the requirements of SMCRA, and the proposed revision may be subject public review at which time members of the public could submit comments to NDPSC to address potential issues with the revision.</p>
<p>Casey and Julie Voight</p>	<p>North Dakota is also currently attempting to authorize numerous carbon capture and sequestration projects that are supported by the Biden Administration, and in some cases are intended to make the burning of lignite and ND coal plants viable as the United States energy sector transitions away from fossil fuels. Adding additional federal coal reserves to a mine and plant that are not utilizing the CCS technology conflicts with the government’s goals in this regard.</p>	<p>As noted in the SEA, the Coyote Creek Mine does not currently employ any CCUS technology, and there are no permit requirements to employ CCUS or reduce greenhouse gas (GHG) emissions through other means; therefore, GHG emissions from the Proposed Action and their contribution to cumulative GHG levels and climate change are unavoidable and irretrievable throughout the life of the mine.</p> <p>Under the No Action Alternative, the 5.2 million tons of federal coal described in the Proposed Action would be replaced on a one-to-one basis with private coal that has been previously leased to the Coyote Creek Mine. Mining the equivalent of 5.2 million tons of mineable non-federal coal would occur at the existing rate of 2.5 million tons per year in other permitted areas. Coyote Station would continue to combust coal from other Coyote Creek Mine production areas at current rates, independent of the coal in the LBA Tracts, until 2040. Coyote Station would operate, as needed, independent of the coal in the LBA Tracts. Further, if the federal mining plan is approved as described in the Proposed Action, then the 5.2 million tons of federal coal would be mined and combusted, but the mine would not mine the equivalent amount of private coal at a later time because that amount of private coal is not needed for the mine to be able to supply Coyote Station until the current life of mine estimate of 2040. Therefore, the No Action Alternative would not change the estimated GHG emission rates for existing conditions.</p>

Commentor	Comment	OSMRE Response to Comment
<p>Casey and Julie Voight</p>	<p>It is also important to note that the Mine’s plan is subject to significant control by the Coyote Station, and the Voigts have previously pointed out that the coal power plant at Coyote Station and the Coyote Creek Mine have a lignite sales agreement that has allowed the Coyote Station power plant veto authority over any mine plans created by Coyote Creek Mine, such that the two entities are in fact a single source and should be permitted as such. Before any federal coal leases are issued based on the current mine plan, this issue should be considered and OSM should require the Mine plan to accurately reflect the joint operation of the power plant and the mine. The Lignite Sales Agreement between the Mine and the Coyote Station provides that “Coyote Station is [the Mine’s] only customer under an all-requirements cost-plus management fee LSA. Under the LSA, Coyote [Creek Mine] receives a contractually-agreed fee based on the amount of lignite delivered. While Coyote [Creek Mine] is responsible for all mine operations, the Coyote Station Owners are responsible for funding all mine operating costs and guarantee all of the capital required to build and operate the mine.” Additional characterizations of the LSA make it clear that the Station and the Mine are operating as a single source and should be treated as such in permitting decisions:</p> <p>The price and other economic assumptions used to estimate the recoverable reserves are supported by the existing all-requirements LSA and the life-of-mine plan associated with that contract. Compensation to Coyote under the LSA includes reimbursement of all mine operating costs plus a contractually-agreed fee based on the amount of coal delivered. Coyote Station is located directly next to the Coyote Creek Mine (i.e. a mine-mouth operation) and 100% of the required coal to operate the Coyote Station is sourced from the Coyote Creek Mine.</p> <p>The LSA eliminates the Coyote Creek Mine’s exposure to spot coal market price fluctuations. As a result of the cost-plus nature of the all-requirements LSA and the mine-mouth location of Coyote Station, factors such transportation costs, location and quality of competing coal reserves, and the ability to compete in the market are not relevant considerations in determining the economic feasibility and viability of the coal reserves associated with the Coyote Creek Mine.</p> <p>The issues related to the power plant and mine being a single source were discussed at EPA and copies of some of that correspondence are included with these comments and incorporated herein by reference.</p>	<p>As detailed in Section 1.2.1 of the SEA, the Coyote Station is not considered a connected action to this Proposed Action. The Proposed Action would not change production levels at the Coyote Station or require changes to its current regulatory permits. If the mining plan is rejected, the Coyote Station would continue to operate and be supplied with coal from other Coyote Creek Mine production areas. The Coyote Station would operate, as needed, independent of the coal in the LBA Tracts. Although the Coyote Station is not considered a connected action, operating data from the power plant are included in this SEA to provide context and to assist with analyzing the reasonably foreseeable future action of combustion of coal sourced from the LBA Tracts. Furthermore, Section 3.3.1.2 of the 2020 EA (reference (1)) describes the air quality permitting requirements for the Coyote Creek Mine.</p>
<p>Casey and Julie Voight</p>	<p>The federal coal lease should not have been issued here and was issued on an emergency basis in violation of pertinent law.</p>	<p>As described in the comment report for the 2020 EA (reference (1)), the BLM reviewed the rules and regulations of an emergency lease sale (43 CFR 3425.1-4) and concluded that the CCMC LBA met the standards of an emergency lease sale in that 1) if the coal resources were not leased, they would have been bypassed in the reasonably foreseeable future, and 2) if the coal resources were leased, some portion of federal coal tracts applied for would be used within 3 years. BLM issued the federal coal lease NDM 110277 in November 2020.</p> <p>The application for Coyote Creek Coal Company states they would like to mine the coal in T. 143 N., R 89 W., 5th Principal Meridian Section 24: SW¼, Section 26: SE¼, by 2021. Under 43 CFR §3425.1-4(i) Emergency leasing, it states, the federal coal is needed within 3 years (A) to maintain an existing mining operation at its current average annual level of production on the date of application. BLM received this application on December 13, 2017, and, therefore, this criterion is met. Also stated in the coal lease application, the applicant will bypass the coal if the coal lease is not issued. Under Emergency Leasing regulation §3425.1-4(ii), if the coal deposits are not leased, they would be bypassed in the reasonably foreseeable future, and, therefore, this criterion is met. An emergency coal lease is still subject to a public lease sale, including fair market value requirements, and the standard conditions stipulated to in a federal coal lease. The emergency lease increases the diligence requirements such that the operator must be mining coal on the tract within three years of lease issuance.</p>
<p>Casey and Julie Voight</p>	<p>The Voigts respectfully request that the OSMRE either deny the requested approval or conduct a full Environmental Impact Statement prior to issuing any approvals in this matter.</p>	<p>Regarding preparation of an Environmental Impact Statement (EIS), OSMRE determined that the proposed federal mining plan does not meet the criteria in Part 516 of the Departmental Manual Chapter 13.4 – <i>Major Actions Normally Requiring an EIS</i>. It should be noted that neither the 2020 BLM EA incorporated by reference nor this supplemental EA identified any significant impacts that would require further analysis at the level of an EIS. Because the Proposed Action and No Action alternatives would produce nearly identical levels of GHG emissions, the Proposed Action would not have significant impacts on climate when compared to the No Action.</p>

Commentor	Comment	OSMRE Response to Comment
<p>Casey and Julie Voight</p>	<p>It has become apparent that the North Dakota Public Service Commission is using “policy memos” in order to relax reclamation standards and requirements for replacement of suitable plant growth material, as is reflected in a recent complaint brought to the ND PSC by the Voigts (see Complaint of Casey and Julie Voigt with Exhibits in Public Service Commission Case No. RC-23-348). The use of such “policy memos” as a replacement for submitting and obtaining approval from OSMRE for amended regulations should not be tolerated.</p>	<p>Mining and reclamation activities would proceed as described in Section 2.4.1. of the 2020 EA (reference (1)). As noted in the public comment report, the 2020 EA was written with the assumption that all terms and conditions of the federal coal lease, as well as the NDPSC mine permits and federal mining plan, will be implemented as required. The NDPSC inspects the mine at least partially each month and fully each quarter to enforce compliance with the state mining laws. BLM also conducts inspections quarterly to enforce compliance with the terms and conditions of the lease. To the extent that NDPSC discovers a violation of its state mining laws, its enforcement program will require remedial action by the mine operator to abate the violation. In the event that a mine operator proposes a revision to their existing mining permit, the NDPSC would process the proposed revision per the requirements of SMCRA, and the proposed revision may be subject public review at which time members of the public could submit comments to NDPSC to address potential issues with the revision.</p>