Appendix N
Record of Non-Applicability and Air Conformity Applicability Model

N.1 AIR CONFORMITY ANALYSIS

This appendix provides the Air Conformity Applicability Model (ACAM) report and record of air analysis (ROAA).

The Army used the Air Force's ACAM to analyze a net change in emissions to assess the potential air quality impacts associated with Reuse Alternatives 3, 4, and 5. The analysis was performed in accordance with Air Force Manual (AFMAN) 32-7002, Environmental Compliance and Pollution Prevention; the Department of the Air Force (DAF) Environmental Impact Analysis Process (EIAP) (Title 32 of the Code of Federal Regulations [CFR] Part 989); and the General Conformity Rule (GCR) (40 CFR §§ 93.150–93.165). This report provides a summary of the ACAM analysis.

Total combined direct and indirect emissions associated with Reuse Alternatives 3, 4, and 5 were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady-state" (net gain/loss upon action fully implemented) emissions. Construction and operational emissions from Reuse Alternatives 3, 4, and 5 are presented in Tables N-1 and N-3, respectively. General Conformity under Section 1.76 of the Clean Air Act has been evaluated for the action described above according to the requirements of 40 CFR 93 Subpart B.

Based on the analysis, the requirements of this rule are:

_____ applicable

__X__ not applicable

The Army concludes that *de minimis* thresholds for applicable criteria pollutants would not be exceeded nor would the projected emissions be regionally significant (i.e., greater than 10 percent of the air basin's emission budgets) as a result of implementation of Reuse Alternative 3, 4, or 5. The emissions data supporting that conclusion are shown in Tables N-1 and N-3, which summarize the ACAM report for the Record of Non-Applicability (RONA).

The Army concludes that further formal conformity determination procedures are not required, resulting in this RONA.

RONA Approval Date: _____

Signature: _____

N.1.1 Air Impact Analysis

Based on the attainment status at the action location, the requirements of the GCR are not applicable. Total reasonably foreseeable net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving steady-state emissions (i.e., no net gain/loss in emission stabilized once the action is fully implemented). The ACAM analysis uses the latest and most accurate emission estimation techniques available; all algorithms, emission factors, and methodologies used are described in detail in *Air Emissions Guide for Air Force Stationary Sources*, *Air Emissions Guide for Air Force Mobile Sources*, and *Air Emissions Guide for Air Force Transitory Sources* (AFCEC 2024a, 2024b, 2024c).

"Insignificance indicators" were used in the analysis to provide an indication of the significance of the potential impact of Reuse Alternatives 3, 4, and 5 on local air quality. The insignificant indicators are trivial (*de minimis*) rate thresholds that have been demonstrated to have little-to-no impact on air quality. The insignificance indicators are the 250-ton per year (-tpy) Prevention of Significant Deterioration (PSD) major source threshold and 25 tpy for lead (Pb) for actions occurring in areas that are in attainment (not exceeding any of the National Ambient Air Quality Standards [NAAQS]). The indicators do not define a significant impact; however, they do provide a threshold to use in identifying actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutants is considered so insignificant that the action will not cause or contribute to an exceedance of any NAAQS.

N.1.2 Air Impact Analysis Results Summary

None of the estimated annual net emissions associated with Reuse Alternatives 3, 4, and 5 are above the insignificance indicators; therefore, the alternatives will not cause or contribute to an exceedance of one or more of the NAAQS and will have an insignificant impact on air quality. No further air assessment is needed. The alternative's net emissions for every year through achieving steady state were compared against the insignificance indicators and are summarized in Tables N-1, N-2, and N-3. The full ACAM reports are in Attachment A.

Table N-1. ROAA ACAM and Dredging Summary Report–Estimated Construction Emissions for Alternatives 3, 4, and 5 (tpy)

Alternative	VOC	NH3	SOx	NOx	CO	PM10	PM2.5	Pb	Exceedance
De minimis threshold	250.00	250.00	250.00	250.00	250.	250.00	250.00	25.00	No
Alternative 3	0.13	0.01	0.01	0.91	1.50	3.250	0.037	0.000	No
Alternative 4	0.292	0.01	0.01	2.09	3.25	3.272	0.082	0.000	No
Alternative 5 (5-year annual)	8.87	8.68	0.10	232.45	76.56	34.57	8.15	0	No

Source: ACAM reports (Attachment A).
Notes: CO = carbon monoxide; NH_3 = ammonia; NO_x = nitrogen oxides; Pb = lead; $PM_{2.5}$ = fine inhalable particulate matter with a diameter generally 2.5 micrometers (µm) or smaller; PM_{10} = inhalable particulate matter with a diameter generally 10 µm or smaller; SO_x = sulfur oxides; tpy = tons per year; VOC = volatile organic compound.

Table N-2. Five Year Average Report–Dredging Emissions for Alternative 5

Type	Source	Quantity	HC	VOC	CO	NOx	PM 10	PM 2.5	CO2
Crew Boat	Engine	1	0.084	0.09	0.50	3.11	0.07	0.07	211.60
Dredge	Main Engine	1	2.71	2.86	40.52	168.77	6.28	6.10	13,764.86
Hopper Barge	Engine	1	0.452	0.48	6.75	28.13	1.05	1.02	2294.144
Excavator	Engine	1	0.01	0.01	0.01	0.02	0.000792	0.01	38.40
Hopper Pump	Vessel Mounted	2	0.05	0.05	0.87	3.72	0.074	0.07	239.65
Dredge	Vessel-Mounted engines	3	0.07	0.07	1.31	5.58	0.11	0.11	359.48

Source: Bureau of Ocean Energy Management Dredging Emission Calculator
Notes: CO = carbon monoxide; CO_2 = carbon dioxide; HC= Hydrocarbons; NH_3 = ammonia; NO_x = nitrogen oxides; $PM_{2.5}$ = fine inhalable particulate matter with a diameter generally 2.5 micrometers (µm) or smaller; PM_{10} = inhalable particulate matter with a diameter generally 10 µm or smaller; SO_x = sulfur oxides; VOC = volatile organic compound.

Table N-3. ROAA ACAM Summary Report–Estimated Operations Emissions for Alternatives 3, 4, and 5 (tpy)

Alternative	VOC	NH3	SOx	NOx	CO	PM10	PM2.5	Pb	Exceedance
De minimis threshold	250.000	250.000	250.000	250.000	250.000	250.000	250.000	25.000	
Alternative 3	0.024	0.004	0.000	0.014	0.325	0.001	0.000	0.000	No
Alternative 4	0.055	0.009	0.000	0.031	0.001	0.001	0.001	0.000	No
Alternative 5	6.440	0.110	0.850	3.590	15.880	2.270	3.970	0.000	No

Source: ACAM reports (Attachment A).
Notes: CO = carbon monoxide; NH_3 = ammonia; NO_x = nitrogen oxides; Pb = lead; $PM_{2.5}$ = fine inhalable particulate matter with a diameter generally 2.5 micrometers (µm) or smaller; PM_{10} = inhalable particulate matter with a diameter generally 10 µm or smaller; SO_x = sulfur oxides; tpy = tons per year; VOC = volatile organic compound.

N.1.3 Assumptions

The cumulative dredge volume by phase is assumed to be 4 million cubic yards (including water). The other assumptions used in ACAM are listed in Table N-4.

Table N-4. ROAA ACAM Assumptions

Project Name	Construction SF	Footprint SF[a]	Staging Area SF[b]	Parking SF[c]	Land-scaping SF[d]	Utilities SF[e]	Total SF Ground Disturbance
Conveyor system, 10,500 ft x 2 ft (LRA Parcel 20 and Brickhouse Slough)	21,000	21,000	4,200	6,300	5,250	2,100	38,850
Dry and liquid bulk wharf, 800 ft x 100 ft (Brickhouse Slough)	40,000	40,000	8,000	12,000	10,000	4,000	74,000
Floating dry dock, 120 ft x 80 ft (Brickhouse Slough)	28,000	28,000	5,600	8,400	7,000	2,800	51,800
LOLO wharf, 350 ft x 50 ft (included in the L-shaped LOLO wharf listed next)	87,000	87,000	17,400	26,100	21,750	8,700	160,950
L-shaped LOLO wharf, 600 ft x 50 ft and 290 ft x 75 ft	51,000	51,000	10,200	15,300	12,750	5,100	94,350
Recreational parking area (existing, unpaved)		-	-	-	-	-	10,000
Recreational boat ramp for	15,750	15,750	3,150	4,725	3,938	1,575	29,138

Project Name	Construction SF	Footprint SF[a]	Staging Area SF[b]	Parking SF[c]	Land-scaping SF[d]	Utilities SF[e]	Total SF Ground Disturbance
canoes/ kayaks, 75 ft x 70 ft							
Recreational boat ramp access trail for canoes/kayaks (elevated boardwalk), 300 ft x 10 ft	10,000	10,000	2,000	3,000	2,500	1,000	18,500
Recreational trail (elevated boardwalk), 9,500 ft x 10 ft	10,000	10,000	2,000	3,000	2,500	1,000	18,500
Recreational area or solar photovoltaic arrays atop capped landfill, 675 ft x 755 ft	1	1	0	0	0	0	180,000
Repair fleeting area, 450 ft x 120 ft		-	-	-	-	-	54,000
Travel lift piers (two at 200 ft x 20 ft each) with a landside dry dock (750 ft x 65 ft)	487,500	487,500	97,500	146,250	121,875	48,750	414,375
Wharf access road, 425 ft x 40 ft (LRA Parcel 20 and Brickhouse Slough)	17,000	17,000	3,400	5,100	4,250	1,700	31,450

Notes: ft = feet; LRA = local redevelopment authority; LOLO = lift-on/lift-off; SF = square feet.
Estimated Using Soil Disturbance Area in Cost Estimates (UFC 1-200-01, UFC 1-200-02); Army Cost Analysis Manual 2020; and Independent Government Cost Estimate Handbook Feb 2023.
a Building Footprint: The area directly occupied by the building itself. This is calculated as total square footage divided by the number of stories, resulting in the footprint square footage.
b Construction Staging Areas: Staging areas are where materials, equipment, and site offices are placed during construction. A standard estimate for these areas ranges from 10% to 30% of the building's footprint. In this case, the average value of 20% is used.
c Parking and Access Roads: Parking spaces generally require 300–350 SF each, accounting for the stall, drive aisles, and space between cars (UFC 1-200-01). Alternatively, parking and access roads can be estimated at 30% of the total construction area.
d Landscaping and Grading: This includes any additional area disturbed for landscaping or site preparation beyond the building footprint. Landscaping areas are typically estimated between 10% to 30% of the building's footprint, with an average value of 25% used here.
e On-Site Utility Installation Areas: This accounts for space required for trenching and installing utilities, such as electricity, water, and sewage lines. Utility areas are generally estimated between 10% and 30% of the building's footprint. The lowest estimate of 10% is used for this calculation.

N.2 CLIMATE AND GREENHOUSE GAS EMISSIONS ANALYSIS

N.2.1 Climate

Illinois lies midway between the Continental Divide and the Atlantic Ocean, and the state's southern tip is 500 miles north of the Gulf of Mexico. Illinois's climate is typically continental with cold winters, warm summers, and frequent short fluctuations in temperature, humidity, cloudiness, and wind direction. Average annual temperatures range from 48 degrees Fahrenheit (°F) to 67 °F. Average winter highs range from the 30s to the mid-40s, while average lows range from the teens to the upper 20s. Average summer highs are in the 80s, while lows are in the 60s across the state. Both spring and fall have more moderate temperatures. Average spring highs range from 57 °F to 67 °F, while average lows range from 36 °F to 48 °F. Average fall highs range from 60 °F to 70 °F, while average lows range from 40 °F to 48 °F. Average precipitation exceeds 32 inches a year. Snowfall is approximately 36 inches a year in northern Illinois (Wuebbles et al. 2021).

N.2.2 Greenhouse Gas Emissions Analysis

ACAM also was used to estimate greenhouse gas (GHG) emissions and assess the theoretical GHGs associated with Reuse Alternatives 3, 4, and 5. The analysis was performed in accordance with AFMAN 32-7002, the EIAP, and the DAF Air Quality EIAP Guide.

GHGs produced by fossil fuel combustion are primarily carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), which represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO_2 equivalent (CO_2e). The CO_2e considers the global warming potential (GWP) of each GHG, which is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP enables comparison of global warming impacts between different gases; the higher a gas' GWP, the more that gas contributes to climate change in comparison to CO_2. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current *Air Emissions Guide for Air Force Stationary Sources* and *Air Emissions Guide for Air Force Mobile Sources* (AFCEC 2024a, 2024b).

The PSD threshold for GHG of 75,000 tpy of CO_2e (or 68,039 metric tons per year [mtpy]) is an indicator or "threshold of insignificance" for National Environmental Policy Act air quality impacts in all areas. This indicator does not define a significant impact, however; it provides a threshold to use to identify actions that are insignificant (*de minimis*, or too trivial or minor to merit consideration).

- Actions with a net change in GHG (CO2e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis.
- Actions with a net change in GHG (CO2e) emissions above the insignificance indicator (threshold) are considered only potentially significant and require further assessment to determine if the action poses a significant impact.

For further detail on insignificance indicators, see *Level II, Air Quality Quantitative Assessment, Insignificance Indicators* (AFCEC 2023). Table N-5 summarizes the action-related GHG emissions on a calendar-year basis through the Alternatives 3 projected industry-standard 36-

year life cycle (TCLF 2019). Table N-6 summarizes it for Alternative 4, and Table N-7 summarizes it for Alternative 5 (TCLF 2019).

N.2.3 GHG Relative Significance Assessment

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (global, national, and regional) and the degree (intensity) of the proposed action's effects. See *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change* (CEQ 2023). The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative's annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

The action's surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, the context of an action is the local area's ambient air quality relative to meeting the NAAQS expressed as an attainment, nonattainment, or maintenance area (this designation is considered the attainment status). GHGs are nonhazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can potentially cause only warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact on local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action's GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance based on its annual net change in GHG emissions in relation or proportionally to the global, national, and regional annual GHG emissions.

Alternatives 3, 4, and 5 would result in both short-term and long-term GHG emissions. During construction, GHG emissions would primarily be generated from the use of diesel- and gasoline-powered equipment, material transport, and worker vehicle trips. These activities are expected to result in a temporary, localized increase in CO_2, CH_4, and N_2O emissions. Following construction, operational emissions would be associated with facility energy use, vehicular traffic, equipment operation, and routine maintenance activities. Depending on the scope and intensity of operations, GHG emissions could be ongoing and contribute incrementally to regional and global climate change.

While the combined construction and operational GHG emissions from Alternatives 3, 4, and 5 are not expected to be significant in the context of national or global totals, they represent a measurable contribution to cumulative climate impacts. Where feasible, mitigation measures such as energy-efficient building systems, low-emission vehicles, and sustainable operational practices will be implemented to reduce the project's GHG footprint. Alternatives 3, 4, and 5 align with applicable federal and state GHG reduction goals and do not conflict with broader climate adaptation or mitigation strategies. Therefore, no significant adverse impacts from GHG emissions are anticipated.

Table N-5. Annual GHG Emissions for Alternative 3, Total GHG Relative Significance (mtpy)

Years	Category	CO_2	CH_4	N_2O	CO_2e
2026–2062	State Total	5,089,471,905	17,467,988	1,951,510	5,108,891,403
2026–2062	U.S. Total	133,547,808,654	666,299,704	39,018,399	134,253,126,756
2026–2062	Action	963	0.043276	0.015587	969
Not applicable	Percent of State Totals	0.00001892%	0.00000025%	0.00000080%	0.00001896%
Not applicable	Percent of U.S. Totals	0.00000072%	0.00000001%	0.00000004%	0.00000072%

Source: ACAM reports (Attachment A).
Note: CO_2e = carbon dioxide equivalent (accounting for the GWP of each GHG).

Table N-6. Annual GHG Emissions for Alternative 4, Total GHG Relative Significance (mtpy)

Years	Category	CO_2	CH_4	N_2O	CO_2e
2026–2062	State Total	5,089,471,905	17,467,988	1,951,510	5,108,891,403
2026–2062	U.S. Total	133,547,808,654	666,299,704	39,018,399	134,253,126,756
2026–2062	Action	2,165	0.09715	0.036212	2,178
Not applicable	Percent of State Totals	0.00004253%	0.00000056%	0.00000186%	0.00004263%
Not applicable	Percent of U.S. Totals	0.00000162%	0.00000001%	0.00000009%	0.00000162%

Source: ACAM reports (Attachment A).
Note: CO_2e = carbon dioxide equivalent (accounting for the GWP of each GHG).

Table N-7. Annual GHG Emissions for Alternative 5, Total GHG Relative Significance (mtpy)

Years	Category	CO_2	CH_4	N_2O	CO_2e
2025–2044	State Total	3,914,978,388	13,436,914	1,501,162	3,929,916,464
2025–2044	U.S. Total	102,729,083,580	512,538,234	30,014,153	103,271,635,966
2025–2044	Action	33,496.00	8.85	9.02	33513.87
Not applicable	Percent of State Totals	0.00085559%	0.00006586%	0.00060087%	0.00085279%
Not applicable	Percent of U.S. Totals	0.00003261%	0.00000173%	0.00003005%	0.00003245%

Source: ACAM reports (Attachment A).
Note: CO_2e = carbon dioxide equivalent (accounting for the GWP of each GHG).

N.3 FEDERAL RECOMMENDED BEST MANAGEMENT PRACTICES FOR AIR QUALITY

Diesel emissions and fugitive dust from project construction may pose environmental and human health risks and should be minimized. In 2002, the U.S. Environmental Protection Agency (USEPA) classified diesel emissions as a likely human carcinogen and in 2012, the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Acute exposures can lead to other health problems, such as eye and nose irritation, headaches, nausea, asthma, and other respiratory system issues. Longer term exposure may worsen heart and lung disease. The USEPA provided recommendations to control construction emissions for the Reuse Alternatives in a Construction Emission Control Checklist. In the checklist, USEPA recommends consideration of and commitment to the following protective measures should any of the Reuse Alternatives be implemented.

N.3.1 Mobile and Stationary Source Diesel Controls

Purchase or solicit bids that require the use of vehicles that are equipped with zero-emission technologies or the most advanced emission control systems available. Commit to the best available emissions control technologies for project equipment to meet the following standards:

- On-Highway Vehicles: On-highway vehicles should meet or exceed the USEPA exhaust emissions standards for model year 2010 and newer heavy-duty, on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, and so forth).
- Non-Road Vehicles and Equipment: Non-road vehicles and equipment should meet, or exceed, the USEPA Tier 4 exhaust emissions standards for heavy-duty, non-road compression-ignition engines (e.g., construction equipment, non-road trucks, and so forth).
- Marine Vessels: Marine vessels hauling materials for infrastructure projects should meet or exceed the latest USEPA exhaust emissions standards for marine compression-ignition engines (e.g., Tier 4 for Category 1 and 2 vessels, and Tier 3 for Category 3 vessels).
- Low-Emission Equipment Exemptions: The equipment specifications outlined above should be met unless (1) a piece of specialized equipment is not available for purchase or lease within the United States; or (2) the relevant project contractor has been awarded funds to retrofit existing equipment or purchase/lease new equipment, but the funds are not yet available.

Consider requiring the following best practices through the construction contracting or oversight process:

- Establish and enforce a clear anti-idling policy for the construction site.
- Use on-site renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use electric starting aids such as block heaters with older vehicles to warm the engines.
- Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Where possible, retrofit older tier or Tier 0 non-road engines with an exhaust filtration device to capture diesel particulate matter before they enter the construction site.
- Replace the engines of older vehicles and/or equipment with diesel- or alternatively fueled engines certified to meet newer, more stringent emissions standards (e.g., plug-in hybrid-electric vehicles, battery-electric vehicles, fuel cell electric vehicles, and advanced technology locomotives) or with zero-emission electric systems.
- Retire older vehicles, given the significant contribution of vehicle emissions to the poor air quality conditions. Implement programs to encourage the voluntary removal from use and the marketplace of pre-2010 model year on-highway vehicles (e.g., scrappage rebates) and replace them with newer vehicles that meet or exceed the latest USEPA exhaust emissions standards or with zero-emission electric vehicles and/or equipment.

N.3.2 Fugitive Dust Source Controls

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/ organic dust palliative, where appropriate. This applies to both inactive and active sites during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

N.3.3 Occupational Health

- Reduce exposure through work practices and training, such as maintaining filtration devices and training diesel-equipment operators to perform routine inspections.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.
- Use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Use respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, an N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on the type of work being conducted, and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator to be worn. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a National Institute for Occupational Safety and Health approval number.

N.4 REFERENCES

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N.5 ACRONYMS AND ABBREVIATIONS

Acronym	Term
°F	degrees Fahrenheit
ACAM	Air Conformity Applicability Model
AFMAN	Air Force manual
CFR	Code of Federal Regulations
CH_4	methane
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
DAF	Department of the Air Force
EIAP	Environmental Impact Analysis Process
GCR	General Conformity Rule
GHG	greenhouse gas
GWP	global warming potential
HEPA	high-efficiency particulate air
mph	miles per hour
mtpy	metric tons per year
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
Pb	lead
PSD	Prevention of Significant Deterioration
ROAA	record of air analysis
tpy	tons per year
U.S.	United States (adjective only)
USEPA	U.S. Environmental Protection Agency

ATTACHMENT A:
ACAM REPORTS

AIR CONFORMITY APPLICABLITY MODEL REPORT

ALTERNATIVE 3

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the *Environmental Impact Analysis Process* (EIAP, 32 CFR 989); the *General Conformity Rule* (GCR, 40 CFR 93 Subpart B); and the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the ACAM analysis.

Report generated with ACAM version: 5.0.24a

a. Action Location:

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: SVADA BRAC EA

c. Project Number/s (if applicable): SVADA BRAC EA

d. Projected Action Start Date: 1 / 2026

e. Action Description:

Cumulative effects:
Construction-
Construction of 640300 (80800 + 135000 + 424500) square feet assumed to be 24 feet high built over 12 months.
Parking areas associated with these buildings. Assume grading is 2* size of construction area, 1,280,600 and that paving is the same area.
Assume architectural coatings of the same area as construction, 640300.
Assume trenching for utilities 5 percent of the constructed building area, 32,000 square feet.
Grading and paving of 113 acres = 4,922,280 square feet
Grading of 123 (113 +10) acres = 5,357,880 square feet
Tank construction of 5 5,000 gallon tanks ~ 8ft x 13.5 ft each with 15,000 gallons/year
Demolition-
Using demolition costs provided in the Reuse Plan and assuming a $4/sq foot, $248,600 = 65000 square feet demolished and hauled off-site.
Operations-
Average 40 mile round trip commute for no more than 1845 new jobs in the region.
Backup generators (15).
Heating of 135,00 sq ft manufacturing building.
****Emissions reductions from a solar farm were calculated separately. ****

Plus Alternative 1 Construction-
Excavation of 400,000 cubic yards that would be hauled off-site over 3 months (2700000 sq ft at 4 ft depth).
Construction of an 80000 square feet wharf that was assumed to be 2 feet high built over 12 months.
Site grading and paving of 65000 square feet (for the Wharf access road; the haul road exists in Google Earth) over 3 months. Repaving of the haul road would be maintenance and not considered in this analysis. Assume hauling 2400 cubic yards of material off-site.
Site grading and paving of 5500 square feet (for the rec boat ramp) over 2 months. No hauling.
Site grading of 17000 square feet (for the rec trail) over 2 months.+ same sized construction "building" that is 2 feet. No hauling.
No architectural coatings.
Utility trenching over distance of wharf road ~ 1600 feet* 6 feet wide at 1 ft depth (9,600 sqft)
Plus Alternative 2 Construction-

Excavation of an additional 525,000 cubic yards that would be hauled off-site over 3 months. (3550000 sq ft at 4 ft depth)
Construction of an additional wharf 52,000 square feet assumed to be 2 feet high built over 12 months.
Utility trenching over the length of the additional wharf ~ 600 feet* 6 feet wide at 1 ft depth (3,600 sq ft)
Plus Alternative 3 Construction-
Excavation of an additional 315,000 cubic yards that would be hauled off-site over 3 months.
Operations-
Average 40 mile round trip commute for no more than 400 new jobs in the region.
Backup generator (4) at the wharf.
****Emissions reductions from a solar farm were calculated separately. ****

f. Point of Contact:

Name: Dewey
Title: Cooper
Organization: TT
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the GCR are:

____ applicable
_X_ not applicable

Total reasonably foreseeable net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (cCba.e., no net gain/loss in emission stabilized and the action is fully implemented) emissions. The ACAM analysis uses the latest and most accurate emission estimation techniques available; all algorithms, emission factors, and methodologies used are described in detail in the *USAF Air Emissions Guide for Air Force Stationary Sources*, the *USAF Air Emissions Guide for Air Force Mobile Sources*, and the *USAF Air Emissions Guide for Air Force Transitory Sources*.

"Insignificance Indicators" were used in the analysis to provide an indication of the significance of the proposed Action's potential impacts to local air quality. The insignificance indicators are trivial (de minimis) rate thresholds that have been demonstrated to have little to no impact to air quality. These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold and 25 ton/yr for lead for actions occurring in areas that are "Attainment" (cCba.e., not exceeding any National Ambient Air Quality Standard (NAAQS)). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutants is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQS. For further detail on insignificance indicators, refer to *Level II, Air Quality Quantitative Assessment, Insignificance Indicators*.

The action's net emissions for every year through achieving steady state were compared against the Insignificance Indicators and are summarized below.

Analysis Summary:

2026

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			

VOC	0.130	250	No
NOx	0.911	250	No
CO	1.495	250	No
SOx	0.002	250	No
PM 10	3.225	250	No
PM 2.5	0.037	250	No
Pb	0.000	25	No
NH3	0.006	250	No

2027

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No

NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2031

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2032

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2033

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2034

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No

CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2035

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2036

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2037

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2038

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No

SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2039

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2040

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2041

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2042

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No

PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2043

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2044

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2045

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2046

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No

PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2047

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2048

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2049

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2050

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No

Pb	0.000	25	No
NH3	0.004	250	No

2051

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.004	250	No
NOx	0.002	250	No
CO	0.054	250	No
SOx	0.000	250	No
PM 10	0.000	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.001	250	No

2052 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.000	250	No
NOx	0.000	250	No
CO	0.000	250	No
SOx	0.000	250	No
PM 10	0.000	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.000	250	No

None of the estimated annual net emissions associated with this action are above the insignificance indicators; therefore, the action will not cause or contribute to an exceedance of one or more NAAQSs and will have an insignificant impact on air quality. No further air assessment is needed.

Dewey, Cooper — Aug 07 2025

Name, Title — **Date**

1. General Information

- Action Location

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Action Title: SVADA BRAC EA

- Project Number/s (if applicable): SVADA BRAC EA

- Projected Action Start Date: 1 / 2026

- Action Purpose and Need:

The Proposed Action is the Army's disposal of LRA Parcel 20 by transferring it to the LRA or other appropriate recipients for their reuse. This EIS analyzes the potential direct effects of the Army conveying LRA Parcel 20; the potential indirect effects of reuse of the parcel; and cumulative effects. Once the parcel is transferred, it would pass beyond the administrative control of the Army. All subsequent use of the land would be independent of the Army. The Proposed Action Area is defined as the boundaries of LRA Parcel 20.

- Action Description:

Cumulative effects:
Construction-
Construction of 640300 (80800 + 135000 + 424500) square feet assumed to be 24 feet high built over 12 months.
Parking areas associated with these buildings. Assume grading is 2* size of construction area, 1,280,600 and that paving is the same area.
Assume architectural coatings of the same area as construction, 640300.
Assume trenching for utilities 5 percent of the constructed building area, 32,000 square feet.
Grading and paving of 113 acres = 4,922,280 square feet
Grading of 123 (113 +10) acres = 5,357,880 square feet
Tank construction of 5 5,000 gallon tanks ~ 8ft x 13.5 ft each with 15,000 gallons/year
Demolition-
Using demolition costs provided in the Reuse Plan and assuming a $4/sq foot, $248,600 = 65000 square feet demolished and hauled off-site.
Operations-
Average 40 mile round trip commute for no more than 1845 new jobs in the region.
Backup generators (15).
Heating of 135,00 sq ft manufacturing building.
****Emissions reductions from a solar farm were calculated separately. ****

Plus Alternative 1 Construction-
Excavation of 400,000 cubic yards that would be hauled off-site over 3 months (2700000 sq ft at 4 ft depth).
Construction of an 80000 square feet wharf that was assumed to be 2 feet high built over 12 months.
Site grading and paving of 65000 square feet (for the Wharf access road; the haul road exists in Google Earth) over 3 months. Repaving of the haul road would be maintenance and not considered in this analysis. Assume hauling 2400 cubic yards of material off-site.
Site grading and paving of 5500 square feet (for the rec boat ramp) over 2 months. No hauling.
Site grading of 17000 square feet (for the rec trail) over 2 months.+ same sized construction "building" that is 2 feet. No hauling.
No architectural coatings.
Utility trenching over distance of wharf road ~ 1600 feet* 6 feet wide at 1 ft depth (9,600 sqft)
Plus Alternative 2 Construction-

Excavation of an additional 525,000 cubic yards that would be hauled off-site over 3 months. (3550000 sq ft at 4 ft depth)
Construction of an additional wharf 52,000 square feet assumed to be 2 feet high built over 12 months.
Utility trenching over the length of the additional wharf ~ 600 feet* 6 feet wide at 1 ft depth (3,600 sq ft)
Plus Alternative 3 Construction-
Excavation of an additional 315,000 cubic yards that would be hauled off-site over 3 months.
Operations-
Average 40 mile round trip commute for no more than 400 new jobs in the region.
Backup generator (4) at the wharf.
****Emissions reductions from a solar farm were calculated separately. ****

- Point of Contact

Name: Dewey
Title: Cooper
Organization: TT
Email:
Phone Number:

Report generated with ACAM version: 5.0.24a

- Activity List:

Activity Type		Activity Title
2.	Construction / Demolition	Alternative 3, the recreation only
3.	Personnel	Public

Emission factors and air emission estimating methods come from the United States Air Force's Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and Air Emissions Guide for Air Force Transitory Sources.

2. Construction / Demolition

2.1 General Information & Timeline Assumptions

- Activity Location

County: Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Alternative 3, the recreation only

- Activity Description:

Alternative 3, the recreation only reuse alternative, would implement only recreational elements on LRA Parcel 20 (Table 3.3-1 and Figure 3.3-1). The recreational elements would include an elevated, boardwalk-style walking trail through the parcel, a canoe and kayak ramp on Commander's Pond, and a recreational area atop the capped Cleanup Site 20, Abandoned Landfill, that could include parking, recreational fields, a dog park, and picnic tables or gazebos. The walking trail and recreation area would be accessible from Sewage Plant Road (JCD LRA 2023).

- Activity Start Date

Start Month: 1
Start Month: 2026

- Activity End Date

Indefinite: False
End Month: 8
End Month: 2026

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	0.107656
SO_x	0.001843
NO_x	0.898101
CO	1.197035

Pollutant	Total Emissions (TONs)
PM 10	3.224508
PM 2.5	0.036703
Pb	0.000000
NH_3	0.002374

- Global Scale Activity Emissions of Greenhouse Gasses:

Pollutant	Total Emissions (TONs)
CH_4	0.008305
N_2O	0.003175

Pollutant	Total Emissions (TONs)
CO_2	206.189954
CO_2e	207.263780

2.1 Site Grading Phase

2.1.1 Site Grading Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 4
Number of Days: 0

2.1.2 Site Grading Phase Assumptions

- General Site Grading Information
Area of Site to be Graded (ft^2): 80000
Amount of Material to be Hauled On-Site (yd^3): 4000
Amount of Material to be Hauled Off-Site (yd^3): 2000

- Site Grading Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Graders Composite	1	6
Other Construction Equipment Composite	1	8
Rubber Tired Dozers Composite	1	6
Tractors/Loaders/Backhoes Composite	1	7

- Vehicle Exhaust
Average Hauling Truck Capacity (yd^3): 20 (default)
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC

POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.1.3 Site Grading Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour) (default)

Graders Composite [HP: 148] [LF: 0.41]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.31292	0.00490	2.52757	3.39734	0.14041	0.12918
Other Construction Equipment Composite [HP: 82] [LF: 0.42]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.28160	0.00487	2.73375	3.50416	0.15811	0.14546
Rubber Tired Dozers Composite [HP: 367] [LF: 0.4]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.35280	0.00491	3.22260	2.72624	0.14205	0.13069
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour) (default)

Graders Composite [HP: 148] [LF: 0.41]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02153	0.00431	530.81500	532.63663
Other Construction Equipment Composite [HP: 82] [LF: 0.42]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02140	0.00428	527.54121	529.35159
Rubber Tired Dozers Composite [HP: 367] [LF: 0.4]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02160	0.00432	532.54993	534.37751
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101

LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.1.4 Site Grading Phase Formula(s)

- Fugitive Dust Emissions per Phase
$PM10_{FD} = (20 * ACRE * WD) / 2000$

$PM10_{FD}$: Fugitive Dust PM 10 Emissions (TONs)
20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
ACRE: Total acres (acres)
WD: Number of Total Work Days (days)
2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase
$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
HA_{OnSite}: Amount of Material to be Hauled On-Site (yd^3)
$HA_{OffSite}$: Amount of Material to be Hauled Off-Site (yd^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works

NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.2 Building Construction Phase

2.2.1 Building Construction Phase Timeline Assumptions

- Phase Start Date
Start Month: 5
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 4
Number of Days: 0

2.2.2 Building Construction Phase Assumptions

- General Building Construction Information
Building Category: Office or Industrial
Area of Building (ft^2): 10000
Height of Building (ft): 10
Number of Units: N/A

- Building Construction Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Cranes Composite	1	4
Forklifts Composite	2	6
Tractors/Loaders/Backhoes Composite	1	8

- Vehicle Exhaust
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips
Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC

POVs	50.00	50.00	0	0	0	0	0

- Vendor Trips

Average Vendor Round Trip Commute (mile): 40 (default)

- Vendor Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

2.2.3 Building Construction Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour) (default)

Cranes Composite [HP: 367] [LF: 0.29]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.19758	0.00487	1.83652	1.63713	0.07527	0.06925
Forklifts Composite [HP: 82] [LF: 0.2]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.24594	0.00487	2.34179	3.57902	0.11182	0.10287
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour) (default)

Cranes Composite [HP: 367] [LF: 0.29]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02140	0.00428	527.46069	529.27080
Forklifts Composite [HP: 82] [LF: 0.2]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02138	0.00428	527.09717	528.90603
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.2.4 Building Construction Phase Formula(s)

- Construction Exhaust Emissions per Phase

$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$VMT_{VE} = BA * BH * (0.42 / 1000) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
BA: Area of Building (ft^2)
BH: Height of Building (ft)
(0.42 / 1000): Conversion Factor ft^3 to trips (0.42 trip / 1000 ft^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Vender Trips Emissions per Phase

$VMT_{VT} = BA * BH * (0.38 / 1000) * HT$

VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
BA: Area of Building (ft^2)

BH: Height of Building (ft)
(0.38 / 1000): Conversion Factor ft^3 to trips (0.38 trip / 1000 ft^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.3 Paving Phase

2.3.1 Paving Phase Timeline Assumptions

- Phase Start Date
Start Month: 3
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 4
Number of Days: 0

2.3.2 Paving Phase Assumptions

- General Paving Information
Paving Area (ft^2): 60000

- Paving Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Cement and Mortar Mixers Composite	4	6
Pavers Composite	1	7
Paving Equipment Composite	1	8
Rollers Composite	1	7
Tractors/Loaders/Backhoes Composite	1	7

- Vehicle Exhaust
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips
Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.3.3 Paving Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour) (default)

Cement and Mortar Mixers Composite [HP: 10] [LF: 0.56]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.55280	0.00854	4.19778	3.25481	0.16332	0.15025
Pavers Composite [HP: 81] [LF: 0.42]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.23717	0.00486	2.53335	3.43109	0.12904	0.11872
Paving Equipment Composite [HP: 89] [LF: 0.36]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18995	0.00487	2.06537	3.40278	0.08031	0.07388
Rollers Composite [HP: 36] [LF: 0.38]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.54202	0.00541	3.61396	4.09268	0.15387	0.14156
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour) (default)

Cement and Mortar Mixers Composite [HP: 10] [LF: 0.56]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02313	0.00463	570.16326	572.11992
Pavers Composite [HP: 81] [LF: 0.42]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02133	0.00427	525.80405	527.60847
Paving Equipment Composite [HP: 89] [LF: 0.36]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02141	0.00428	527.70636	529.51732
Rollers Composite [HP: 36] [LF: 0.38]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02381	0.00476	586.91372	588.92786
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101

LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.3.4 Paving Phase Formula(s)

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase
$VMT_{VE} = PA * 0.25 * (1 / 27) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
PA: Paving Area (ft^2)
0.25: Thickness of Paving Area (ft)
(1 / 27): Conversion Factor cubic feet to cubic yards (1 yd^3 / 27 ft^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)

VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Off-Gassing Emissions per Phase
$VOC_P = (2.62 * PA) / 43560 / 2000$

VOC_P: Paving VOC Emissions (TONs)
2.62: Emission Factor (lb/acre)
PA: Paving Area (ft^2)
43560: Conversion Factor square feet to acre (43560 ft2 / $acre)^2$ / acre)
2000: Conversion Factor square pounds to TONs (2000 lb / TON)

3. Personnel

3.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location
County: Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Public

- Activity Description:
Rec Area

- Activity Start Date
Start Month: 2
Start Year: 2026

- Activity End Date
Indefinite: No
End Month: 2
End Year: 2051

- Activity Emissions of Criteria Pollutants:

Pollutant	Total Emissions (TONs)
VOC	0.613623
SO_x	0.004349
NO_x	0.347302
CO	8.140869

Pollutant	Total Emissions (TONs)
PM 10	0.013382
PM 2.5	0.011826
Pb	0.000000
NH_3	0.104371

- Global Scale Activity Emissions of Greenhouse Gasses:

Pollutant	Total Emissions (TONs)
CH_4	0.039495
N_2O	0.014020

Pollutant	Total Emissions (TONs)
CO_2	855.468176
CO_2e	860.627902

3.2 Personnel Assumptions

- Number of Personnel

Active Duty Personnel:	0
Civilian Personnel:	20
Support Contractor Personnel:	0
Air National Guard (ANG) Personnel:	0
Reserve Personnel:	0

- Default Settings Used: No

- Average Personnel Round Trip Commute (mile): 40

- Personnel Work Schedule

Active Duty Personnel:	5 Days Per Week
Civilian Personnel:	2 Days Per Week
Support Contractor Personnel:	5 Days Per Week
Air National Guard (ANG) Personnel:	4 Days Per Week
Reserve Personnel:	4 Days Per Month

3.3 Personnel On Road Vehicle Mixture

- On Road Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	37.55	60.32	0	0.03	0.2	0	1.9
GOVs	54.49	37.73	4.67	0	0	3.11	0

3.4 Personnel Emission Factor(s)

- On Road Vehicle Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- On Road Vehicle Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

3.5 Personnel Formula(s)

- Personnel Vehicle Miles Travel for Work Days per Year

$VMT_P = NP * WD * AC$

VMT_P: Personnel Vehicle Miles Travel (miles/year)
NP: Number of Personnel

WD: Work Days per Year
AC: Average Commute (miles)

- Total Vehicle Miles Travel per Year

$VMT_{Total} = VMT_{AD} + VMT_{C} + VMT_{SC} + VMT_{ANG} + VMT_{AFRC}$

VMT_{Total}: Total Vehicle Miles Travel (miles)
VMT_{AD}: Active Duty Personnel Vehicle Miles Travel (miles)
VMT_{C}: Civilian Personnel Vehicle Miles Travel (miles)
VMT_{SC}: Support Contractor Personnel Vehicle Miles Travel (miles)
VMT_{ANG}: Air National Guard Personnel Vehicle Miles Travel (miles)
VMT_{AFRC}: Reserve Personnel Vehicle Miles Travel (miles)

- Vehicle Emissions per Year

$V_{POL} = (VMT_{Total} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{Total}: Total Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Personnel On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to estimate GHG emissions associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the *Environmental Impact Analysis Process* (EIAP, 32 CFR 989); and the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the GHG emissions analysis.

Report generated with ACAM version: 5.0.24a

a. Action Location:

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: SVADA BRAC EA

c. Project Number/s (if applicable): SVADA BRAC EA

d. Projected Action Start Date: 1 / 2026

e. Action Description:

Cumulative effects:
Construction-
Construction of 640300 (80800 + 135000 + 424500) square feet assumed to be 24 feet high built over 12 months.
Parking areas associated with these buildings. Assume grading is 2* size of construction area, 1,280,600 and that paving is the same area.
Assume architectural coatings of the same area as construction, 640300.
Assume trenching for utilities 5 percent of the constructed building area, 32,000 square feet.
Grading and paving of 113 acres = 4,922,280 square feet
Grading of 123 (113 +10) acres = 5,357,880 square feet
Tank construction of 5 5,000 gallon tanks ~ 8ft x 13.5 ft each with 15,000 gallons/year
Demolition-
Using demolition costs provided in the Reuse Plan and assuming a $4/sq foot, $248,600 = 65000 square feet demolished and hauled off-site.
Operations-
Average 40 mile round trip commute for no more than 1845 new jobs in the region.
Backup generators (15).
Heating of 135,00 sq ft manufacturing building.
****Emissions reductions from a solar farm were calculated separately. ****

Plus Alternative 1 Construction-
Excavation of 400,000 cubic yards that would be hauled off-site over 3 months (2700000 sq ft at 4 ft depth).
Construction of an 80000 square feet wharf that was assumed to be 2 feet high built over 12 months.
Site grading and paving of 65000 square feet (for the Wharf access road; the haul road exists in Google Earth) over 3 months. Repaving of the haul road would be maintenance and not considered in this analysis. Assume hauling 2400 cubic yards of material off-site.
Site grading and paving of 5500 square feet (for the rec boat ramp) over 2 months. No hauling.
Site grading of 17000 square feet (for the rec trail) over 2 months.+ same sized construction "building" that is 2 feet. No hauling.
No architectural coatings.
Utility trenching over distance of wharf road ~ 1600 feet* 6 feet wide at 1 ft depth (9,600 sqft)
Plus Alternative 2 Construction-

Excavation of an additional 525,000 cubic yards that would be hauled off-site over 3 months. (3550000 sq ft at 4 ft depth)
Construction of an additional wharf 52,000 square feet assumed to be 2 feet high built over 12 months.
Utility trenching over the length of the additional wharf ~ 600 feet* 6 feet wide at 1 ft depth (3,600 sq ft)
Plus Alternative 3 Construction-
Excavation of an additional 315,000 cubic yards that would be hauled off-site over 3 months.
Operations-
Average 40 mile round trip commute for no more than 400 new jobs in the region.
Backup generator (4) at the wharf.
****Emissions reductions from a solar farm were calculated separately. ****

f. Point of Contact:

Name: Dewey
Title: Cooper
Organization: TT
Email:
Phone Number:

2. Analysis: Total combined direct and indirect GHG emissions associated with the action were estimated through ACAM on a calendar-year basis from the action's start through the action's "steady state" (SS, net gain/loss in emission stabilized and the action is fully implemented) of emissions.

GHG Emissions Analysis Summary:

GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). These three GHGs represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO2 equivalents (CO2e). The CO2e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP allows comparison of global warming impacts between different gases; the higher the GWP, the more that gas contributes to climate change in comparison to CO2. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and/or Air Emissions Guide for Air Force Transitory Sources.

The Air Force has adopted the Prevention of Significant Deterioration (PSD) threshold for GHG of 75,000 ton per year (ton/yr) of CO2e (or 68,039 metric ton per year, mton/yr) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. This indicator does not define a significant impact; however, it provides a threshold to identify actions that are insignificant (de minimis, too trivial or minor to merit consideration). Actions with a net change in GHG (CO2e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Note that actions with a net change in GHG (CO2e) emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact. For further detail on insignificance indicators see Level II, Air Quality Quantitative Assessment, Insignificance Indicators (April 2023).

The following table summarizes the action-related GHG emissions on a calendar-year basis through the projected steady state of the action.

Action-Related Annual GHG Emissions (mton/yr)						
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**	**Threshold**	**Exceedance**
2026	215	0.00884365	0.00334488	217	68,039	No

2027	31	0.00142842	0.00050705	31	68,039	No
2028	31	0.00142842	0.00050705	31	68,039	No
2029	31	0.00142842	0.00050705	31	68,039	No
2030	31	0.00142842	0.00050705	31	68,039	No
2031	31	0.00142842	0.00050705	31	68,039	No
2032	31	0.00142842	0.00050705	31	68,039	No
2033	31	0.00142842	0.00050705	31	68,039	No
2034	31	0.00142842	0.00050705	31	68,039	No
2035	31	0.00142842	0.00050705	31	68,039	No
2036	31	0.00142842	0.00050705	31	68,039	No
2037	31	0.00142842	0.00050705	31	68,039	No
2038	31	0.00142842	0.00050705	31	68,039	No
2039	31	0.00142842	0.00050705	31	68,039	No
2040	31	0.00142842	0.00050705	31	68,039	No
2041	31	0.00142842	0.00050705	31	68,039	No
2042	31	0.00142842	0.00050705	31	68,039	No
2043	31	0.00142842	0.00050705	31	68,039	No
2044	31	0.00142842	0.00050705	31	68,039	No
2045	31	0.00142842	0.00050705	31	68,039	No
2046	31	0.00142842	0.00050705	31	68,039	No
2047	31	0.00142842	0.00050705	31	68,039	No
2048	31	0.00142842	0.00050705	31	68,039	No
2049	31	0.00142842	0.00050705	31	68,039	No
2050	31	0.00142842	0.00050705	31	68,039	No
2051	5	0.00023807	0.00008451	5	68,039	No
2052 [SS Year]	0	0	0	0	68,039	No

The following U.S. and State's GHG emissions estimates (next two tables) are based on a five-year average (2016 through 2020) of individual state-reported GHG emissions (Reference: State Climate Summaries 2022, NOAA National Centers for Environmental Information, National Oceanic and Atmospheric Administration. https://statesummaries.ncics.org/downloads/).

State's Annual GHG Emissions (mton/yr)				
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**
2026	195,748,919	671,846	75,058	234,450,991
2027	195,748,919	671,846	75,058	234,450,991
2028	195,748,919	671,846	75,058	234,450,991
2029	195,748,919	671,846	75,058	234,450,991
2030	195,748,919	671,846	75,058	234,450,991
2031	195,748,919	671,846	75,058	234,450,991
2032	195,748,919	671,846	75,058	234,450,991
2033	195,748,919	671,846	75,058	234,450,991
2034	195,748,919	671,846	75,058	234,450,991
2035	195,748,919	671,846	75,058	234,450,991
2036	195,748,919	671,846	75,058	234,450,991
2037	195,748,919	671,846	75,058	234,450,991
2038	195,748,919	671,846	75,058	234,450,991
2039	195,748,919	671,846	75,058	234,450,991
2040	195,748,919	671,846	75,058	234,450,991
2041	195,748,919	671,846	75,058	234,450,991
2042	195,748,919	671,846	75,058	234,450,991
2043	195,748,919	671,846	75,058	234,450,991
2044	195,748,919	671,846	75,058	234,450,991
2045	195,748,919	671,846	75,058	234,450,991

2046	195,748,919	671,846	75,058	234,450,991
2047	195,748,919	671,846	75,058	234,450,991
2048	195,748,919	671,846	75,058	234,450,991
2049	195,748,919	671,846	75,058	234,450,991
2050	195,748,919	671,846	75,058	234,450,991
2051	195,748,919	671,846	75,058	234,450,991
2052 [SS Year]	0	0	0	0

U.S. Annual GHG Emissions (mton/yr)				
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**
2026	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2027	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2028	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2029	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2030	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2031	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2032	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2033	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2034	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2035	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2036	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2037	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2038	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2039	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2040	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2041	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2042	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2043	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2044	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2045	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2046	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2047	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2048	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2049	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2050	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2051	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2052 [SS Year]	0	0	0	0

GHG Relative Significance Assessment:

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (Rtba.e., global, national, and regional) and the degree (intensity) of the proposed action's effects. The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative's annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

The action's surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, context of an action is the local area's ambient air quality relative to meeting the NAAQSs, expressed as attainment, nonattainment, or maintenance areas (this designation is considered the attainment status). GHGs are non-hazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can only potentially cause warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact to local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action's GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance, based on their annual net change in GHG emissions, in relation to or proportionally to the global, national, and regional annual GHG emissions.

To provide real-world context to the GHG and climate change effects on a global scale, an action's net change in GHG emissions is compared relative to the state (where the action will occur) and U.S. annual emissions. The following table provides a relative comparison of an action's net change in GHG emissions vs. state and U.S. projected GHG emissions for the same time period.

Total GHG Relative Significance (mton)					
		CO2	**CH4**	**N2O**	**CO2e**
2026-2052	State Total	5,285,220,824	18,139,833	2,026,568	6,330,176,750
2026-2052	U.S. Total	138,684,262,833	691,926,615	40,519,106	168,795,771,199
2026-2052	Action	963	0.043364	0.015599	969
Percent of State Totals		0.00001822%	0.00000024%	0.00000077%	0.00001530%
Percent of U.S. Totals		0.00000069%	0.00000001%	0.00000004%	0.00000057%

From a global context, the action's total GHG percentage of total global GHG for the same time period is: 0.00000008%.*

* Global value based on the U.S. emitting 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, https://www.c2es.org/content/international-emissions).

AIR CONFORMITY APPLICABLITY MODEL REPORT

ALTERNATIVE 4

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the *Environmental Impact Analysis Process* (EIAP, 32 CFR 989); the *General Conformity Rule* (GCR, 40 CFR 93 Subpart B); and the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the ACAM analysis.

Report generated with ACAM version: 5.0.24a

a. Action Location:

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: SVADA BRAC EA

c. Project Number/s (if applicable): SVADA BRAC EA

d. Projected Action Start Date: 1 / 2026

e. Action Description:

Cumulative effects:
Construction-
Construction of 640300 (80800 + 135000 + 424500) square feet assumed to be 24 feet high built over 12 months.
Parking areas associated with these buildings. Assume grading is 2* size of construction area, 1,280,600 and that paving is the same area.
Assume architectural coatings of the same area as construction, 640300.
Assume trenching for utilities 5 percent of the constructed building area, 32,000 square feet.
Grading and paving of 113 acres = 4,922,280 square feet
Grading of 123 (113 +10) acres = 5,357,880 square feet
Tank construction of 5 5,000 gallon tanks ~ 8ft x 13.5 ft each with 15,000 gallons/year
Demolition-
Using demolition costs provided in the Reuse Plan and assuming a $4/sq foot, $248,600 = 65000 square feet demolished and hauled off-site.
Operations-
Average 40 mile round trip commute for no more than 1845 new jobs in the region.
Backup generators (15).
Heating of 135,00 sq ft manufacturing building.
****Emissions reductions from a solar farm were calculated separately. ****

Plus Alternative 1 Construction-
Excavation of 400,000 cubic yards that would be hauled off-site over 3 months (2700000 sq ft at 4 ft depth).
Construction of an 80000 square feet wharf that was assumed to be 2 feet high built over 12 months.
Site grading and paving of 65000 square feet (for the Wharf access road; the haul road exists in Google Earth) over 3 months. Repaving of the haul road would be maintenance and not considered in this analysis. Assume hauling 2400 cubic yards of material off-site.
Site grading and paving of 5500 square feet (for the rec boat ramp) over 2 months. No hauling.
Site grading of 17000 square feet (for the rec trail) over 2 months.+ same sized construction "building" that is 2 feet. No hauling.
No architectural coatings.
Utility trenching over distance of wharf road ~ 1600 feet* 6 feet wide at 1 ft depth (9,600 sqft)
Plus Alternative 2 Construction-

Excavation of an additional 525,000 cubic yards that would be hauled off-site over 3 months. (3550000 sq ft at 4 ft depth)
Construction of an additional wharf 52,000 square feet assumed to be 2 feet high built over 12 months.
Utility trenching over the length of the additional wharf ~ 600 feet* 6 feet wide at 1 ft depth (3,600 sq ft)
Plus Alternative 3 Construction-
Excavation of an additional 315,000 cubic yards that would be hauled off-site over 3 months.
Operations-
Average 40 mile round trip commute for no more than 400 new jobs in the region.
Backup generator (4) at the wharf.
****Emissions reductions from a solar farm were calculated separately. ****

f. Point of Contact:

Name: Dewey
Title: Cooper
Organization: TT
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the GCR are:

____ applicable
_X_ not applicable

Total reasonably foreseeable net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (cCba.e., no net gain/loss in emission stabilized and the action is fully implemented) emissions. The ACAM analysis uses the latest and most accurate emission estimation techniques available; all algorithms, emission factors, and methodologies used are described in detail in the *USAF Air Emissions Guide for Air Force Stationary Sources*, the *USAF Air Emissions Guide for Air Force Mobile Sources*, and the *USAF Air Emissions Guide for Air Force Transitory Sources*.

"Insignificance Indicators" were used in the analysis to provide an indication of the significance of the proposed Action's potential impacts to local air quality. The insignificance indicators are trivial (de minimis) rate thresholds that have been demonstrated to have little to no impact to air quality. These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold and 25 ton/yr for lead for actions occurring in areas that are "Attainment" (cCba.e., not exceeding any National Ambient Air Quality Standard (NAAQS)). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutants is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQS. For further detail on insignificance indicators, refer to *Level II, Air Quality Quantitative Assessment, Insignificance Indicators*.

The action's net emissions for every year through achieving steady state were compared against the Insignificance Indicators and are summarized below.

Analysis Summary:

2026

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			

VOC	0.130	250	No
NOx	0.911	250	No
CO	1.495	250	No
SOx	0.002	250	No
PM 10	3.225	250	No
PM 2.5	0.037	250	No
Pb	0.000	25	No
NH3	0.006	250	No

2027

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No

NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2031

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2032

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2033

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2034

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No

CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2035

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2036

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2037

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2038

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No

SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2039

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2040

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2041

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2042

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No

PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2043

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2044

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2045

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2046

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No

PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2047

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2048

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2049

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.004	250	No

2050

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.024	250	No
NOx	0.014	250	No
CO	0.325	250	No
SOx	0.000	250	No
PM 10	0.001	250	No
PM 2.5	0.000	250	No

Pb	0.000	25	No
NH3	0.004	250	No

2051

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.004	250	No
NOx	0.002	250	No
CO	0.054	250	No
SOx	0.000	250	No
PM 10	0.000	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.001	250	No

2052 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.000	250	No
NOx	0.000	250	No
CO	0.000	250	No
SOx	0.000	250	No
PM 10	0.000	250	No
PM 2.5	0.000	250	No
Pb	0.000	25	No
NH3	0.000	250	No

None of the estimated annual net emissions associated with this action are above the insignificance indicators; therefore, the action will not cause or contribute to an exceedance of one or more NAAQSs and will have an insignificant impact on air quality. No further air assessment is needed.

Dewey, Cooper — Aug 07 2025

Name, Title — **Date**

1. General Information

- Action Location

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Action Title: SVADA BRAC EA

- Project Number/s (if applicable): SVADA BRAC EA

- Projected Action Start Date: 1 / 2026

- Action Purpose and Need:

The Proposed Action is the Army's disposal of LRA Parcel 20 by transferring it to the LRA or other appropriate recipients for their reuse. This EIS analyzes the potential direct effects of the Army conveying LRA Parcel 20; the potential indirect effects of reuse of the parcel; and cumulative effects. Once the parcel is transferred, it would pass beyond the administrative control of the Army. All subsequent use of the land would be independent of the Army. The Proposed Action Area is defined as the boundaries of LRA Parcel 20.

- Action Description:

Cumulative effects:
Construction-
Construction of 640300 (80800 + 135000 + 424500) square feet assumed to be 24 feet high built over 12 months.
Parking areas associated with these buildings. Assume grading is 2* size of construction area, 1,280,600 and that paving is the same area.
Assume architectural coatings of the same area as construction, 640300.
Assume trenching for utilities 5 percent of the constructed building area, 32,000 square feet.
Grading and paving of 113 acres = 4,922,280 square feet
Grading of 123 (113 +10) acres = 5,357,880 square feet
Tank construction of 5 5,000 gallon tanks ~ 8ft x 13.5 ft each with 15,000 gallons/year
Demolition-
Using demolition costs provided in the Reuse Plan and assuming a $4/sq foot, $248,600 = 65000 square feet demolished and hauled off-site.
Operations-
Average 40 mile round trip commute for no more than 1845 new jobs in the region.
Backup generators (15).
Heating of 135,00 sq ft manufacturing building.
****Emissions reductions from a solar farm were calculated separately. ****

Plus Alternative 1 Construction-
Excavation of 400,000 cubic yards that would be hauled off-site over 3 months (2700000 sq ft at 4 ft depth).
Construction of an 80000 square feet wharf that was assumed to be 2 feet high built over 12 months.
Site grading and paving of 65000 square feet (for the Wharf access road; the haul road exists in Google Earth) over 3 months. Repaving of the haul road would be maintenance and not considered in this analysis. Assume hauling 2400 cubic yards of material off-site.
Site grading and paving of 5500 square feet (for the rec boat ramp) over 2 months. No hauling.
Site grading of 17000 square feet (for the rec trail) over 2 months.+ same sized construction "building" that is 2 feet. No hauling.
No architectural coatings.
Utility trenching over distance of wharf road ~ 1600 feet* 6 feet wide at 1 ft depth (9,600 sqft)
Plus Alternative 2 Construction-

Excavation of an additional 525,000 cubic yards that would be hauled off-site over 3 months. (3550000 sq ft at 4 ft depth)
Construction of an additional wharf 52,000 square feet assumed to be 2 feet high built over 12 months.
Utility trenching over the length of the additional wharf ~ 600 feet* 6 feet wide at 1 ft depth (3,600 sq ft)
Plus Alternative 3 Construction-
Excavation of an additional 315,000 cubic yards that would be hauled off-site over 3 months.
Operations-
Average 40 mile round trip commute for no more than 400 new jobs in the region.
Backup generator (4) at the wharf.
****Emissions reductions from a solar farm were calculated separately. ****

- Point of Contact

Name: Dewey
Title: Cooper
Organization: TT
Email:
Phone Number:

Report generated with ACAM version: 5.0.24a

- Activity List:

Activity Type		Activity Title
2.	Construction / Demolition	Alternative 3, the recreation only
3.	Personnel	Public

Emission factors and air emission estimating methods come from the United States Air Force's Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and Air Emissions Guide for Air Force Transitory Sources.

2. Construction / Demolition

2.1 General Information & Timeline Assumptions

- Activity Location

County: Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Alternative 3, the recreation only

- Activity Description:

Alternative 3, the recreation only reuse alternative, would implement only recreational elements on LRA Parcel 20 (Table 3.3-1 and Figure 3.3-1). The recreational elements would include an elevated, boardwalk-style walking trail through the parcel, a canoe and kayak ramp on Commander's Pond, and a recreational area atop the capped Cleanup Site 20, Abandoned Landfill, that could include parking, recreational fields, a dog park, and picnic tables or gazebos. The walking trail and recreation area would be accessible from Sewage Plant Road (JCD LRA 2023).

- Activity Start Date

Start Month: 1
Start Month: 2026

- Activity End Date

Indefinite: False
End Month: 8
End Month: 2026

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	0.107656
SO_x	0.001843
NO_x	0.898101
CO	1.197035

Pollutant	Total Emissions (TONs)
PM 10	3.224508
PM 2.5	0.036703
Pb	0.000000
NH_3	0.002374

- Global Scale Activity Emissions of Greenhouse Gasses:

Pollutant	Total Emissions (TONs)
CH_4	0.008305
N_2O	0.003175

Pollutant	Total Emissions (TONs)
CO_2	206.189954
CO_2e	207.263780

2.1 Site Grading Phase

2.1.1 Site Grading Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 4
Number of Days: 0

2.1.2 Site Grading Phase Assumptions

- General Site Grading Information
Area of Site to be Graded (ft^2): 80000
Amount of Material to be Hauled On-Site (yd^3): 4000
Amount of Material to be Hauled Off-Site (yd^3): 2000

- Site Grading Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Graders Composite	1	6
Other Construction Equipment Composite	1	8
Rubber Tired Dozers Composite	1	6
Tractors/Loaders/Backhoes Composite	1	7

- Vehicle Exhaust
Average Hauling Truck Capacity (yd^3): 20 (default)
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC

POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.1.3 Site Grading Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour) (default)

Graders Composite [HP: 148] [LF: 0.41]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.31292	0.00490	2.52757	3.39734	0.14041	0.12918
Other Construction Equipment Composite [HP: 82] [LF: 0.42]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.28160	0.00487	2.73375	3.50416	0.15811	0.14546
Rubber Tired Dozers Composite [HP: 367] [LF: 0.4]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.35280	0.00491	3.22260	2.72624	0.14205	0.13069
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour) (default)

Graders Composite [HP: 148] [LF: 0.41]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02153	0.00431	530.81500	532.63663
Other Construction Equipment Composite [HP: 82] [LF: 0.42]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02140	0.00428	527.54121	529.35159
Rubber Tired Dozers Composite [HP: 367] [LF: 0.4]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02160	0.00432	532.54993	534.37751
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101

LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.1.4 Site Grading Phase Formula(s)

- Fugitive Dust Emissions per Phase
$PM10_{FD} = (20 * ACRE * WD) / 2000$

$PM10_{FD}$: Fugitive Dust PM 10 Emissions (TONs)
20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
ACRE: Total acres (acres)
WD: Number of Total Work Days (days)
2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase
$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
HA_{OnSite}: Amount of Material to be Hauled On-Site (yd^3)
$HA_{OffSite}$: Amount of Material to be Hauled Off-Site (yd^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works

NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.2 Building Construction Phase

2.2.1 Building Construction Phase Timeline Assumptions

- Phase Start Date
Start Month: 5
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 4
Number of Days: 0

2.2.2 Building Construction Phase Assumptions

- General Building Construction Information
Building Category: Office or Industrial
Area of Building (ft^2): 10000
Height of Building (ft): 10
Number of Units: N/A

- Building Construction Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Cranes Composite	1	4
Forklifts Composite	2	6
Tractors/Loaders/Backhoes Composite	1	8

- Vehicle Exhaust
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips
Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC

POVs	50.00	50.00	0	0	0	0	0

- Vendor Trips

Average Vendor Round Trip Commute (mile): 40 (default)

- Vendor Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

2.2.3 Building Construction Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour) (default)

Cranes Composite [HP: 367] [LF: 0.29]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.19758	0.00487	1.83652	1.63713	0.07527	0.06925
Forklifts Composite [HP: 82] [LF: 0.2]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.24594	0.00487	2.34179	3.57902	0.11182	0.10287
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour) (default)

Cranes Composite [HP: 367] [LF: 0.29]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02140	0.00428	527.46069	529.27080
Forklifts Composite [HP: 82] [LF: 0.2]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02138	0.00428	527.09717	528.90603
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.2.4 Building Construction Phase Formula(s)

- Construction Exhaust Emissions per Phase

$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$VMT_{VE} = BA * BH * (0.42 / 1000) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
BA: Area of Building (ft^2)
BH: Height of Building (ft)
(0.42 / 1000): Conversion Factor ft^3 to trips (0.42 trip / 1000 ft^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Vender Trips Emissions per Phase

$VMT_{VT} = BA * BH * (0.38 / 1000) * HT$

VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
BA: Area of Building (ft^2)

BH: Height of Building (ft)
(0.38 / 1000): Conversion Factor ft^3 to trips (0.38 trip / 1000 ft^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.3 Paving Phase

2.3.1 Paving Phase Timeline Assumptions

- Phase Start Date
Start Month: 3
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 4
Number of Days: 0

2.3.2 Paving Phase Assumptions

- General Paving Information
Paving Area (ft^2): 60000

- Paving Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Cement and Mortar Mixers Composite	4	6
Pavers Composite	1	7
Paving Equipment Composite	1	8
Rollers Composite	1	7
Tractors/Loaders/Backhoes Composite	1	7

- Vehicle Exhaust
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips
Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.3.3 Paving Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour) (default)

Cement and Mortar Mixers Composite [HP: 10] [LF: 0.56]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.55280	0.00854	4.19778	3.25481	0.16332	0.15025
Pavers Composite [HP: 81] [LF: 0.42]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.23717	0.00486	2.53335	3.43109	0.12904	0.11872
Paving Equipment Composite [HP: 89] [LF: 0.36]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18995	0.00487	2.06537	3.40278	0.08031	0.07388
Rollers Composite [HP: 36] [LF: 0.38]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.54202	0.00541	3.61396	4.09268	0.15387	0.14156
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour) (default)

Cement and Mortar Mixers Composite [HP: 10] [LF: 0.56]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02313	0.00463	570.16326	572.11992
Pavers Composite [HP: 81] [LF: 0.42]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02133	0.00427	525.80405	527.60847
Paving Equipment Composite [HP: 89] [LF: 0.36]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02141	0.00428	527.70636	529.51732
Rollers Composite [HP: 36] [LF: 0.38]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02381	0.00476	586.91372	588.92786
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101

LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.3.4 Paving Phase Formula(s)

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase
$VMT_{VE} = PA * 0.25 * (1 / 27) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
PA: Paving Area (ft^2)
0.25: Thickness of Paving Area (ft)
(1 / 27): Conversion Factor cubic feet to cubic yards (1 yd^3 / 27 ft^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)

VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Off-Gassing Emissions per Phase
$VOC_P = (2.62 * PA) / 43560 / 2000$

VOC_P: Paving VOC Emissions (TONs)
2.62: Emission Factor (lb/acre)
PA: Paving Area (ft^2)
43560: Conversion Factor square feet to acre (43560 ft2 / $acre)^2$ / acre)
2000: Conversion Factor square pounds to TONs (2000 lb / TON)

3. Personnel

3.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location
County: Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Public

- Activity Description:
Rec Area

- Activity Start Date
Start Month: 2
Start Year: 2026

- Activity End Date
Indefinite: No
End Month: 2
End Year: 2051

- Activity Emissions of Criteria Pollutants:

Pollutant	Total Emissions (TONs)
VOC	0.613623
SO_x	0.004349
NO_x	0.347302
CO	8.140869

Pollutant	Total Emissions (TONs)
PM 10	0.013382
PM 2.5	0.011826
Pb	0.000000
NH_3	0.104371

- Global Scale Activity Emissions of Greenhouse Gasses:

Pollutant	Total Emissions (TONs)
CH_4	0.039495
N_2O	0.014020

Pollutant	Total Emissions (TONs)
CO_2	855.468176
CO_2e	860.627902

3.2 Personnel Assumptions

- Number of Personnel

Active Duty Personnel:	0
Civilian Personnel:	20
Support Contractor Personnel:	0
Air National Guard (ANG) Personnel:	0
Reserve Personnel:	0

- Default Settings Used: No

- Average Personnel Round Trip Commute (mile): 40

- Personnel Work Schedule

Active Duty Personnel:	5 Days Per Week
Civilian Personnel:	2 Days Per Week
Support Contractor Personnel:	5 Days Per Week
Air National Guard (ANG) Personnel:	4 Days Per Week
Reserve Personnel:	4 Days Per Month

3.3 Personnel On Road Vehicle Mixture

- On Road Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	37.55	60.32	0	0.03	0.2	0	1.9
GOVs	54.49	37.73	4.67	0	0	3.11	0

3.4 Personnel Emission Factor(s)

- On Road Vehicle Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
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LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- On Road Vehicle Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

3.5 Personnel Formula(s)

- Personnel Vehicle Miles Travel for Work Days per Year

$VMT_P = NP * WD * AC$

VMT_P: Personnel Vehicle Miles Travel (miles/year)
NP: Number of Personnel

WD: Work Days per Year
AC: Average Commute (miles)

- Total Vehicle Miles Travel per Year

$VMT_{Total} = VMT_{AD} + VMT_{C} + VMT_{SC} + VMT_{ANG} + VMT_{AFRC}$

VMT_{Total}: Total Vehicle Miles Travel (miles)
VMT_{AD}: Active Duty Personnel Vehicle Miles Travel (miles)
VMT_{C}: Civilian Personnel Vehicle Miles Travel (miles)
VMT_{SC}: Support Contractor Personnel Vehicle Miles Travel (miles)
VMT_{ANG}: Air National Guard Personnel Vehicle Miles Travel (miles)
VMT_{AFRC}: Reserve Personnel Vehicle Miles Travel (miles)

- Vehicle Emissions per Year

$V_{POL} = (VMT_{Total} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{Total}: Total Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Personnel On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to estimate GHG emissions associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the *Environmental Impact Analysis Process* (EIAP, 32 CFR 989); and the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the GHG emissions analysis.

Report generated with ACAM version: 5.0.24a

a. Action Location:

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: SVADA BRAC EA

c. Project Number/s (if applicable): SVADA BRAC EA

d. Projected Action Start Date: 1 / 2026

e. Action Description:

Cumulative effects:
Construction-
Construction of 640300 (80800 + 135000 + 424500) square feet assumed to be 24 feet high built over 12 months.
Parking areas associated with these buildings. Assume grading is 2* size of construction area, 1,280,600 and that paving is the same area.
Assume architectural coatings of the same area as construction, 640300.
Assume trenching for utilities 5 percent of the constructed building area, 32,000 square feet.
Grading and paving of 113 acres = 4,922,280 square feet
Grading of 123 (113 +10) acres = 5,357,880 square feet
Tank construction of 5 5,000 gallon tanks ~ 8ft x 13.5 ft each with 15,000 gallons/year
Demolition-
Using demolition costs provided in the Reuse Plan and assuming a $4/sq foot, $248,600 = 65000 square feet demolished and hauled off-site.
Operations-
Average 40 mile round trip commute for no more than 1845 new jobs in the region.
Backup generators (15).
Heating of 135,00 sq ft manufacturing building.
****Emissions reductions from a solar farm were calculated separately. ****

Plus Alternative 1 Construction-
Excavation of 400,000 cubic yards that would be hauled off-site over 3 months (2700000 sq ft at 4 ft depth).
Construction of an 80000 square feet wharf that was assumed to be 2 feet high built over 12 months.
Site grading and paving of 65000 square feet (for the Wharf access road; the haul road exists in Google Earth) over 3 months. Repaving of the haul road would be maintenance and not considered in this analysis. Assume hauling 2400 cubic yards of material off-site.
Site grading and paving of 5500 square feet (for the rec boat ramp) over 2 months. No hauling.
Site grading of 17000 square feet (for the rec trail) over 2 months.+ same sized construction "building" that is 2 feet. No hauling.
No architectural coatings.
Utility trenching over distance of wharf road ~ 1600 feet* 6 feet wide at 1 ft depth (9,600 sqft)
Plus Alternative 2 Construction-

Excavation of an additional 525,000 cubic yards that would be hauled off-site over 3 months. (3550000 sq ft at 4 ft depth)
Construction of an additional wharf 52,000 square feet assumed to be 2 feet high built over 12 months.
Utility trenching over the length of the additional wharf ~ 600 feet* 6 feet wide at 1 ft depth (3,600 sq ft)
Plus Alternative 3 Construction-
Excavation of an additional 315,000 cubic yards that would be hauled off-site over 3 months.
Operations-
Average 40 mile round trip commute for no more than 400 new jobs in the region.
Backup generator (4) at the wharf.
****Emissions reductions from a solar farm were calculated separately. ****

f. Point of Contact:

Name: Dewey
Title: Cooper
Organization: TT
Email:
Phone Number:

2. Analysis: Total combined direct and indirect GHG emissions associated with the action were estimated through ACAM on a calendar-year basis from the action's start through the action's "steady state" (SS, net gain/loss in emission stabilized and the action is fully implemented) of emissions.

GHG Emissions Analysis Summary:

GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). These three GHGs represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO2 equivalents (CO2e). The CO2e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP allows comparison of global warming impacts between different gases; the higher the GWP, the more that gas contributes to climate change in comparison to CO2. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and/or Air Emissions Guide for Air Force Transitory Sources.

The Air Force has adopted the Prevention of Significant Deterioration (PSD) threshold for GHG of 75,000 ton per year (ton/yr) of CO2e (or 68,039 metric ton per year, mton/yr) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. This indicator does not define a significant impact; however, it provides a threshold to identify actions that are insignificant (de minimis, too trivial or minor to merit consideration). Actions with a net change in GHG (CO2e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Note that actions with a net change in GHG (CO2e) emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact. For further detail on insignificance indicators see Level II, Air Quality Quantitative Assessment, Insignificance Indicators (April 2023).

The following table summarizes the action-related GHG emissions on a calendar-year basis through the projected steady state of the action.

Action-Related Annual GHG Emissions (mton/yr)						
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**	**Threshold**	**Exceedance**
2026	215	0.00884365	0.00334488	217	68,039	No

2027	31	0.00142842	0.00050705	31	68,039	No
2028	31	0.00142842	0.00050705	31	68,039	No
2029	31	0.00142842	0.00050705	31	68,039	No
2030	31	0.00142842	0.00050705	31	68,039	No
2031	31	0.00142842	0.00050705	31	68,039	No
2032	31	0.00142842	0.00050705	31	68,039	No
2033	31	0.00142842	0.00050705	31	68,039	No
2034	31	0.00142842	0.00050705	31	68,039	No
2035	31	0.00142842	0.00050705	31	68,039	No
2036	31	0.00142842	0.00050705	31	68,039	No
2037	31	0.00142842	0.00050705	31	68,039	No
2038	31	0.00142842	0.00050705	31	68,039	No
2039	31	0.00142842	0.00050705	31	68,039	No
2040	31	0.00142842	0.00050705	31	68,039	No
2041	31	0.00142842	0.00050705	31	68,039	No
2042	31	0.00142842	0.00050705	31	68,039	No
2043	31	0.00142842	0.00050705	31	68,039	No
2044	31	0.00142842	0.00050705	31	68,039	No
2045	31	0.00142842	0.00050705	31	68,039	No
2046	31	0.00142842	0.00050705	31	68,039	No
2047	31	0.00142842	0.00050705	31	68,039	No
2048	31	0.00142842	0.00050705	31	68,039	No
2049	31	0.00142842	0.00050705	31	68,039	No
2050	31	0.00142842	0.00050705	31	68,039	No
2051	5	0.00023807	0.00008451	5	68,039	No
2052 [SS Year]	0	0	0	0	68,039	No

The following U.S. and State's GHG emissions estimates (next two tables) are based on a five-year average (2016 through 2020) of individual state-reported GHG emissions (Reference: State Climate Summaries 2022, NOAA National Centers for Environmental Information, National Oceanic and Atmospheric Administration. https://statesummaries.ncics.org/downloads/).

State's Annual GHG Emissions (mton/yr)				
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**
2026	195,748,919	671,846	75,058	234,450,991
2027	195,748,919	671,846	75,058	234,450,991
2028	195,748,919	671,846	75,058	234,450,991
2029	195,748,919	671,846	75,058	234,450,991
2030	195,748,919	671,846	75,058	234,450,991
2031	195,748,919	671,846	75,058	234,450,991
2032	195,748,919	671,846	75,058	234,450,991
2033	195,748,919	671,846	75,058	234,450,991
2034	195,748,919	671,846	75,058	234,450,991
2035	195,748,919	671,846	75,058	234,450,991
2036	195,748,919	671,846	75,058	234,450,991
2037	195,748,919	671,846	75,058	234,450,991
2038	195,748,919	671,846	75,058	234,450,991
2039	195,748,919	671,846	75,058	234,450,991
2040	195,748,919	671,846	75,058	234,450,991
2041	195,748,919	671,846	75,058	234,450,991
2042	195,748,919	671,846	75,058	234,450,991
2043	195,748,919	671,846	75,058	234,450,991
2044	195,748,919	671,846	75,058	234,450,991
2045	195,748,919	671,846	75,058	234,450,991

2046	195,748,919	671,846	75,058	234,450,991
2047	195,748,919	671,846	75,058	234,450,991
2048	195,748,919	671,846	75,058	234,450,991
2049	195,748,919	671,846	75,058	234,450,991
2050	195,748,919	671,846	75,058	234,450,991
2051	195,748,919	671,846	75,058	234,450,991
2052 [SS Year]	0	0	0	0

U.S. Annual GHG Emissions (mton/yr)				
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**
2026	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2027	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2028	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2029	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2030	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2031	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2032	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2033	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2034	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2035	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2036	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2037	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2038	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2039	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2040	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2041	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2042	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2043	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2044	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2045	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2046	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2047	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2048	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2049	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2050	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2051	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2052 [SS Year]	0	0	0	0

GHG Relative Significance Assessment:

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (Rtba.e., global, national, and regional) and the degree (intensity) of the proposed action's effects. The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative's annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

The action's surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, context of an action is the local area's ambient air quality relative to meeting the NAAQSs, expressed as attainment, nonattainment, or maintenance areas (this designation is considered the attainment status). GHGs are non-hazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can only potentially cause warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact to local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action's GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance, based on their annual net change in GHG emissions, in relation to or proportionally to the global, national, and regional annual GHG emissions.

To provide real-world context to the GHG and climate change effects on a global scale, an action's net change in GHG emissions is compared relative to the state (where the action will occur) and U.S. annual emissions. The following table provides a relative comparison of an action's net change in GHG emissions vs. state and U.S. projected GHG emissions for the same time period.

Total GHG Relative Significance (mton)					
		CO2	**CH4**	**N2O**	**CO2e**
2026-2052	State Total	5,285,220,824	18,139,833	2,026,568	6,330,176,750
2026-2052	U.S. Total	138,684,262,833	691,926,615	40,519,106	168,795,771,199
2026-2052	Action	963	0.043364	0.015599	969
Percent of State Totals		0.00001822%	0.00000024%	0.00000077%	0.00001530%
Percent of U.S. Totals		0.00000069%	0.00000001%	0.00000004%	0.00000057%

From a global context, the action's total GHG percentage of total global GHG for the same time period is: 0.00000008%.*

* Global value based on the U.S. emitting 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, https://www.c2es.org/content/international-emissions).

AIR CONFORMITY APPLICABLITY MODEL REPORT

ALTERNATIVE 5

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the *Environmental Impact Analysis Process* (EIAP, 32 CFR 989); the *General Conformity Rule* (GCR, 40 CFR 93 Subpart B); and the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the ACAM analysis.

Report generated with ACAM version: 5.0.24a

a. Action Location:

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: SVADA BRAC EA

c. Project Number/s (if applicable): SVADA BRAC EA

d. Projected Action Start Date: 1 / 2026

e. Action Description:

Cumulative effects:
Construction-
Project Name Construction SF Footprint SF Staging Area SF Parking SF Landscaping Utilities Total SF Ground Disturbance
Conveyor system, 10,500 ft x 2 ft (LRA Parcel 20 and Brickhouse Slough) 21,000 21,000 4,200 6,300 5,250 2,100 38,850
Dry and liquid bulk wharf, 800-ft x 100-ft (Brickhouse Slough) 40,000 40,000 8,000 12,000 10,000 4,000 74,000
Floating dry dock, 120 ft x 80 ft (Brickhouse Slough) 28,000 28,000 5,600 8,400 7,000 2,800 51,800
LOLO wharf, 350 ft x 50 ft (this is also included in the L-shaped LOLO wharf listed below) 87,000 87,000 17,400 26,100 21,750 8,700 160,950
L-shaped LOLO wharf, 600 ft x 50 ft and 290 ft x 75 ft 51,000 51,000 10,200 15,300 12,750 5,100 94,350
Recreational parking area (existing, unpaved) - - - - - 10,000
Recreational boat ramp for canoes/kayaks, 75 ft x 70 ft 15,750 15,750 3,150 4,725 3,938 1,575 29,138
Recreational boat ramp access trail for canoes/kayaks (elevated boardwalk), 300 ft x 10 ft 10000 10,000 2,000 3,000 2,500 1,000 18,500
Recreational trail (elevated boardwalk), 9,500 ft x 10 ft 10,000 10,000 2,000 3,000 2,500 1,000 18,500
Recreational area or solar PV arrays atop capped landfill, 675 ft x 755 ft 1 1 0 0 0 0 180,000
Repair fleeting area, 450 ft x 120 ft - - - - - 54,000
Travel lift piers (two at 200 ft x 20 ft) with a landside dry dock (750 ft x 65 ft) 487,500 487,500 97,500 146,250 121,875 48,750 414,375
Wharf access road, 425 ft x 40 ft (LRA Parcel 20 and Brickhouse Slough) 17000 17,000 3,400 5,100 4,250 1,700 31,450
Dredging Cumulative dredge volume by phase (yd3)
1,237,450

f. Point of Contact:

Name: Dewey
Title: Cooper
Organization: TT
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the GCR are:

____ applicable
__X__ not applicable

Total reasonably foreseeable net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (cCba.e., no net gain/loss in emission stabilized and the action is fully implemented) emissions. The ACAM analysis uses the latest and most accurate emission estimation techniques available; all algorithms, emission factors, and methodologies used are described in detail in the *USAF Air Emissions Guide for Air Force Stationary Sources*, the *USAF Air Emissions Guide for Air Force Mobile Sources*, and the *USAF Air Emissions Guide for Air Force Transitory Sources*.

"Insignificance Indicators" were used in the analysis to provide an indication of the significance of the proposed Action's potential impacts to local air quality. The insignificance indicators are trivial (de minimis) rate thresholds that have been demonstrated to have little to no impact to air quality. These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold and 25 ton/yr for lead for actions occurring in areas that are "Attainment" (cCba.e., not exceeding any National Ambient Air Quality Standard (NAAQS)). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutants is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQS. For further detail on insignificance indicators, refer to *Level II, Air Quality Quantitative Assessment, Insignificance Indicators*.

The action's net emissions for every year through achieving steady state were compared against the Insignificance Indicators and are summarized below.

Analysis Summary:

2026

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	5.314	250	No
NOx	23.122	250	No
CO	26.598	250	No
SOx	0.072	250	No
PM 10	26.987	250	No
PM 2.5	0.795	250	No
Pb	0.000	25	No
NH3	0.154	250	No

2027

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR

		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.942	250	No
NOx	22.811	250	No
CO	26.022	250	No
SOx	0.071	250	No
PM 10	26.973	250	No
PM 2.5	0.784	250	No
Pb	0.000	25	No
NH3	0.151	250	No

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.705	250	No
NOx	20.639	250	No
CO	23.114	250	No
SOx	0.066	250	No
PM 10	26.880	250	No
PM 2.5	0.708	250	No
Pb	0.000	25	No
NH3	0.138	250	No

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.892	250	No
NOx	20.728	250	No
CO	25.438	250	No
SOx	0.068	250	No
PM 10	26.896	250	No
PM 2.5	0.715	250	No
Pb	0.000	25	No
NH3	0.167	250	No

2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	3.294	250	No
NOx	28.023	250	No
CO	31.566	250	No
SOx	0.112	250	No
PM 10	27.451	250	No
PM 2.5	1.269	250	No
Pb	0.000	25	No
NH3	0.167	250	No

2031

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR

		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.588	250	No
NOx	7.383	250	No
CO	8.453	250	No
SOx	0.045	250	No
PM 10	0.571	250	No
PM 2.5	0.561	250	No
Pb	0.000	25	No
NH3	0.029	250	No

2032 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.588	250	No
NOx	7.383	250	No
CO	8.453	250	No
SOx	0.045	250	No
PM 10	0.571	250	No
PM 2.5	0.561	250	No
Pb	0.000	25	No
NH3	0.029	250	No

None of the estimated annual net emissions associated with this action are above the insignificance indicators; therefore, the action will not cause or contribute to an exceedance of one or more NAAQSs and will have an insignificant impact on air quality. No further air assessment is needed.

Dewey, Cooper — Aug 07 2025

Name, Title — **Date**

1. General Information

- Action Location

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Action Title: SVADA BRAC EA

- Project Number/s (if applicable): SVADA BRAC EA

- Projected Action Start Date: 1 / 2026

- Action Purpose and Need:

The Proposed Action is the Army's disposal of LRA Parcel 20 by transferring it to the LRA or other appropriate recipients for their reuse. This EIS analyzes the potential direct effects of the Army conveying LRA Parcel 20; the potential indirect effects of reuse of the parcel; and cumulative effects. Once the parcel is transferred, it would pass beyond the administrative control of the Army. All subsequent use of the land would be independent of the Army. The Proposed Action Area is defined as the boundaries of LRA Parcel 20.

- Action Description:

Cumulative effects:
Construction-
Project Name Construction SF Footprint SF Staging Area SF Parking SF Landscaping Utilities Total SF Ground Disturbance
Conveyor system, 10,500 ft x 2 ft (LRA Parcel 20 and Brickhouse Slough) 21,000 21,000 4,200 6,300 5,250 2,100 38,850
Dry and liquid bulk wharf, 800-ft x 100-ft (Brickhouse Slough) 40,000 40,000 8,000 12,000 10,000 4,000 74,000
Floating dry dock, 120 ft x 80 ft (Brickhouse Slough) 28,000 28,000 5,600 8,400 7,000 2,800 51,800
LOLO wharf, 350 ft x 50 ft (this is also included in the L-shaped LOLO wharf listed below) 87,000 87,000 17,400 26,100 21,750 8,700 160,950
L-shaped LOLO wharf, 600 ft x 50 ft and 290 ft x 75 ft 51,000 51,000 10,200 15,300 12,750 5,100 94,350
Recreational parking area (existing, unpaved) - - - - - 10,000
Recreational boat ramp for canoes/kayaks, 75 ft x 70 ft 15,750 15,750 3,150 4,725 3,938 1,575 29,138
Recreational boat ramp access trail for canoes/kayaks (elevated boardwalk), 300 ft x 10 ft 10000 10,000 2,000 3,000 2,500 1,000 18,500
Recreational trail (elevated boardwalk), 9,500 ft x 10 ft 10,000 10,000 2,000 3,000 2,500 1,000 18,500
Recreational area or solar PV arrays atop capped landfill, 675 ft x 755 ft 1 1 0 0 0 0 180,000
Repair fleeting area, 450 ft x 120 ft - - - - - 54,000
Travel lift piers (two at 200 ft x 20 ft) with a landside dry dock (750 ft x 65 ft) 487,500 487,500 97,500 146,250 121,875 48,750 414,375
Wharf access road, 425 ft x 40 ft (LRA Parcel 20 and Brickhouse Slough) 17000 17,000 3,400 5,100 4,250 1,700 31,450
Dredging Cumulative dredge volume by phase (yd3)
1,237,450

- Point of Contact

Name: Dewey
Title: Cooper

Organization: TT
Email:
Phone Number:

Report generated with ACAM version: 5.0.24a

- Activity List:

Activity Type		Activity Title
2.	Construction / Demolition	Total emissions
3.	Personnel	Employess
4.	Heating	Heating

Emission factors and air emission estimating methods come from the United States Air Force's Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and Air Emissions Guide for Air Force Transitory Sources.

2. Construction / Demolition

2.1 General Information & Timeline Assumptions

- Activity Location
County: Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Total emissions

- Activity Description:
Project Name Construction SF Footprint SF Staging Area SF Parking SF Landscaping Utilities Total SF Ground Disturbance
Conveyor system, 10,500 ft x 2 ft (LRA Parcel 20 and Brickhouse Slough) 21,000 21,000 4,200 6,300 5,250 2,100 38,850
Dry and liquid bulk wharf, 800-ft x 100-ft (Brickhouse Slough) 40,000 40,000 8,000 12,000 10,000 4,000 74,000
Floating dry dock, 120 ft x 80 ft (Brickhouse Slough) 28,000 28,000 5,600 8,400 7,000 2,800 51,800
LOLO wharf, 350 ft x 50 ft (this is also included in the L-shaped LOLO wharf listed below) 87,000 87,000 17,400 26,100 21,750 8,700 160,950
L-shaped LOLO wharf, 600 ft x 50 ft and 290 ft x 75 ft 51,000 51,000 10,200 15,300 12,750 5,100 94,350
Recreational parking area (existing, unpaved) - - - - - 10,000
Recreational boat ramp for canoes/kayaks, 75 ft x 70 ft 15,750 15,750 3,150 4,725 3,938 1,575 29,138
Recreational boat ramp access trail for canoes/kayaks (elevated boardwalk), 300 ft x 10 ft 10000 10,000 2,000 3,000 2,500 1,000 18,500
Recreational trail (elevated boardwalk), 9,500 ft x 10 ft 10,000 10,000 2,000 3,000 2,500 1,000 18,500
Recreational area or solar PV arrays atop capped landfill, 675 ft x 755 ft 1 1 0 0 0 0 180,000
Repair fleeting area, 450 ft x 120 ft - - - - - 54,000
Travel lift piers (two at 200 ft x 20 ft) with a landside dry dock (750 ft x 65 ft) 487,500 487,500 97,500 146,250 121,875 48,750 414,375
Wharf access road, 425 ft x 40 ft (LRA Parcel 20 and Brickhouse Slough) 17000 17,000 3,400 5,100 4,250 1,700 31,450
Dredging Cumulative dredge volume by phase (yd3)
1,237,450

- Activity Start Date
Start Month: 1

Start Month: 2026

- Activity End Date
Indefinite: False
End Month: 0
End Month: 2031

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	16.371367
SO_x	0.342276
NO_x	107.850966
CO	121.961317

Pollutant	Total Emissions (TONs)
PM 10	134.599254
PM 2.5	3.704113
Pb	0.000000
NH_3	0.719875

- Global Scale Activity Emissions of Greenhouse Gasses:

Pollutant	Total Emissions (TONs)
CH_4	1.654033
N_2O	1.653736

Pollutant	Total Emissions (TONs)
CO_2	44162.365450
CO_2e	44646.920866

2.1 Site Grading Phase

2.1.1 Site Grading Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 60
Number of Days: 0

2.1.2 Site Grading Phase Assumptions

- General Site Grading Information
Area of Site to be Graded (ft^2): 217591
Amount of Material to be Hauled On-Site (yd^3): 1000
Amount of Material to be Hauled Off-Site (yd^3): 2200

- Site Grading Default Settings
Default Settings Used: No
Average Day(s) worked per week: 5

- Construction Exhaust

Equipment Name	Number Of Equipment	Hours Per Day
Excavators Composite	1	8
Graders Composite	2	8
Other Construction Equipment Composite	2	8
Rubber Tired Dozers Composite	2	8
Scrapers Composite	4	8
Tractors/Loaders/Backhoes Composite	2	8

- Vehicle Exhaust

Average Hauling Truck Capacity (yd^3): 20
Average Hauling Truck Round Trip Commute (mile): 20

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips
Average Worker Round Trip Commute (mile): 40

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.1.3 Site Grading Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour)

Excavators Composite [HP: 36] [LF: 0.38]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.39317	0.00542	3.40690	4.22083	0.09860	0.09071
Graders Composite [HP: 148] [LF: 0.41]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.31292	0.00490	2.52757	3.39734	0.14041	0.12918
Other Construction Equipment Composite [HP: 82] [LF: 0.42]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.28160	0.00487	2.73375	3.50416	0.15811	0.14546
Rubber Tired Dozers Composite [HP: 367] [LF: 0.4]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.35280	0.00491	3.22260	2.72624	0.14205	0.13069
Scrapers Composite [HP: 423] [LF: 0.48]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.19606	0.00488	1.74061	1.53912	0.06788	0.06245
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour)

Excavators Composite [HP: 36] [LF: 0.38]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02381	0.00476	587.02896	589.04350
Graders Composite [HP: 148] [LF: 0.41]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02153	0.00431	530.81500	532.63663
Other Construction Equipment Composite [HP: 82] [LF: 0.42]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02140	0.00428	527.54121	529.35159
Rubber Tired Dozers Composite [HP: 367] [LF: 0.4]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02160	0.00432	532.54993	534.37751
Scrapers Composite [HP: 423] [LF: 0.48]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02145	0.00429	528.85412	530.66901
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**

Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.1.4 Site Grading Phase Formula(s)

- Fugitive Dust Emissions per Phase

$PM10_{FD} = (20 * ACRE * WD) / 2000$

$PM10_{FD}$: Fugitive Dust PM 10 Emissions (TONs)
20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
ACRE: Total acres (acres)
WD: Number of Total Work Days (days)
2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
HA_{OnSite}: Amount of Material to be Hauled On-Site (yd^3)
$HA_{OffSite}$: Amount of Material to be Hauled Off-Site (yd^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.2 Trenching/Excavating Phase

2.2.1 Trenching / Excavating Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 60
Number of Days: 0

2.2.2 Trenching / Excavating Phase Assumptions

- General Trenching/Excavating Information
Area of Site to be Trenched/Excavated (ft^2): 0
Amount of Material to be Hauled On-Site (yd^3): 0
Amount of Material to be Hauled Off-Site (yd^3): 2200000

- Trenching Default Settings
Default Settings Used: No
Average Day(s) worked per week: 5

- Construction Exhaust

Equipment Name	Number Of Equipment	Hours Per Day

Excavators Composite	2	8
Off-Highway Trucks Composite	25	8
Other General Industrial Equipmen Composite	1	8
Tractors/Loaders/Backhoes Composite	5	8

- Vehicle Exhaust

Average Hauling Truck Capacity (yd^3): 12

Average Hauling Truck Round Trip Commute (mile): 40

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 40

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.2.3 Trenching / Excavating Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour)

Excavators Composite [HP: 36] [LF: 0.38]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.39317	0.00542	3.40690	4.22083	0.09860	0.09071
Off-Highway Trucks Composite [HP: 376] [LF: 0.38]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.17585	0.00489	1.01131	1.17821	0.03561	0.03276
Other General Industrial Equipmen Composite [HP: 35] [LF: 0.34]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.45335	0.00542	3.58824	4.59368	0.11309	0.10404
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour)

Excavators Composite [HP: 36] [LF: 0.38]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02381	0.00476	587.02896	589.04350
Off-Highway Trucks Composite [HP: 376] [LF: 0.38]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02147	0.00429	529.16792	530.98389
Other General Industrial Equipmen Composite [HP: 35] [LF: 0.34]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02385	0.00477	587.87714	589.89459
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252

HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.2.4 Trenching / Excavating Phase Formula(s)

- Fugitive Dust Emissions per Phase

$PM10_{FD} = (20 * ACRE * WD) / 2000$

$PM10_{FD}$: Fugitive Dust PM 10 Emissions (TONs)
20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
ACRE: Total acres (acres)
WD: Number of Total Work Days (days)
2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
HA_{OnSite}: Amount of Material to be Hauled On-Site (yd^3)
$HA_{OffSite}$: Amount of Material to be Hauled Off-Site (yd^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds

EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.3 Building Construction Phase

2.3.1 Building Construction Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 24
Number of Days: 0

2.3.2 Building Construction Phase Assumptions

- General Building Construction Information
Building Category: Office or Industrial
Area of Building (ft^2): 767000
Height of Building (ft): 10
Number of Units: N/A

- Building Construction Default Settings
Default Settings Used: No
Average Day(s) worked per week: 7

- Construction Exhaust

Equipment Name	Number Of Equipment	Hours Per Day
Cranes Composite	1	7
Forklifts Composite	3	8
Generator Sets Composite	1	8
Tractors/Loaders/Backhoes Composite	3	7
Welders Composite	1	8

- Vehicle Exhaust

Average Hauling Truck Round Trip Commute (mile): 40

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

- Vendor Trips

Average Vendor Round Trip Commute (mile): 40

- Vendor Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

2.3.3 Building Construction Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour)

Cranes Composite [HP: 367] [LF: 0.29]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.19758	0.00487	1.83652	1.63713	0.07527	0.06925
Forklifts Composite [HP: 82] [LF: 0.2]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.24594	0.00487	2.34179	3.57902	0.11182	0.10287
Generator Sets Composite [HP: 14] [LF: 0.74]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.53947	0.00793	4.32399	2.85973	0.17412	0.16019
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839
Welders Composite [HP: 46] [LF: 0.45]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.46472	0.00735	3.57020	4.49314	0.09550	0.08786

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour)

Cranes Composite [HP: 367] [LF: 0.29]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02140	0.00428	527.46069	529.27080
Forklifts Composite [HP: 82] [LF: 0.2]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02138	0.00428	527.09717	528.90603
Generator Sets Composite [HP: 14] [LF: 0.74]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02305	0.00461	568.32694	570.27730
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

Welders Composite [HP: 46] [LF: 0.45]				
	CH_4	N_2O	CO_2	CO_2e
Emission Factors	0.02305	0.00461	568.29068	570.24091

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.3.4 Building Construction Phase Formula(s)

- Construction Exhaust Emissions per Phase

$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$VMT_{VE} = BA * BH * (0.42 / 1000) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
BA: Area of Building (ft^2)
BH: Height of Building (ft)
(0.42 / 1000): Conversion Factor ft^3 to trips (0.42 trip / 1000 ft^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)

2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Vender Trips Emissions per Phase

$VMT_{VT} = BA * BH * (0.38 / 1000) * HT$

VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
BA: Area of Building (ft^2)
BH: Height of Building (ft)
(0.38 / 1000): Conversion Factor ft^3 to trips (0.38 trip / 1000 ft^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.4 Architectural Coatings Phase

2.4.1 Architectural Coatings Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 12
Number of Days: 0

2.4.2 Architectural Coatings Phase Assumptions

- General Architectural Coatings Information
Building Category: Non-Residential

Total Square Footage (ft^2): 200000
Number of Units: N/A

- Architectural Coatings Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Worker Trips
Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.4.3 Architectural Coatings Phase Emission Factor(s)

- Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000
MC	0.10954	0.00301	393.48870	397.35238

2.4.4 Architectural Coatings Phase Formula(s)

- Worker Trips Emissions per Phase
$VMT_{WT} = (1 * WT * PA) / 800$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
1: Conversion Factor man days to trips (1 trip / 1 man * day)
WT: Average Worker Round Trip Commute (mile)
PA: Paint Area (ft^2)
800: Conversion Factor square feet to man days (1 ft^2 / 1 man * day)

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Off-Gassing Emissions per Phase
VOC_{AC} = (AB * 2.0 * 0.0116) / 2000.0

VOC_{AC}: Architectural Coating VOC Emissions (TONs)
BA: Area of Building (ft^2)
2.0: Conversion Factor total area to coated area (2.0 ft^2 coated area / total area)
0.0116: Emission Factor (lb/ft^2)
2000: Conversion Factor pounds to tons

2.5 Paving Phase

2.5.1 Paving Phase Timeline Assumptions

- Phase Start Date
Start Month: 3
Start Quarter: 1
Start Year: 2026

- Phase Duration
Number of Month: 4
Number of Days: 0

2.5.2 Paving Phase Assumptions

- General Paving Information
Paving Area (ft^2): 230000

- Paving Default Settings
Default Settings Used: No
Average Day(s) worked per week: 5

- Construction Exhaust

Equipment Name	Number Of Equipment	Hours Per Day
Cement and Mortar Mixers Composite	4	6
Pavers Composite	1	8
Paving Equipment Composite	2	6
Rollers Composite	2	6
Tractors/Loaders/Backhoes Composite	1	7

- Vehicle Exhaust
Average Hauling Truck Round Trip Commute (mile): 40

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips
Average Worker Round Trip Commute (mile): 40

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.5.3 Paving Phase Emission Factor(s)

- Construction Exhaust Criteria Pollutant Emission Factors (g/hp-hour)

Cement and Mortar Mixers Composite [HP: 10] [LF: 0.56]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.55280	0.00854	4.19778	3.25481	0.16332	0.15025
Pavers Composite [HP: 81] [LF: 0.42]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.23717	0.00486	2.53335	3.43109	0.12904	0.11872
Paving Equipment Composite [HP: 89] [LF: 0.36]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18995	0.00487	2.06537	3.40278	0.08031	0.07388
Rollers Composite [HP: 36] [LF: 0.38]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.54202	0.00541	3.61396	4.09268	0.15387	0.14156
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]						
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**
Emission Factors	0.18406	0.00489	1.88476	3.48102	0.06347	0.05839

- Construction Exhaust Greenhouse Gasses Pollutant Emission Factors (g/hp-hour)

Cement and Mortar Mixers Composite [HP: 10] [LF: 0.56]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02313	0.00463	570.16326	572.11992
Pavers Composite [HP: 81] [LF: 0.42]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02133	0.00427	525.80405	527.60847
Paving Equipment Composite [HP: 89] [LF: 0.36]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02141	0.00428	527.70636	529.51732
Rollers Composite [HP: 36] [LF: 0.38]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02381	0.00476	586.91372	588.92786
Tractors/Loaders/Backhoes Composite [HP: 84] [LF: 0.37]				
	CH_4	**N_2O**	**CO_2**	**CO_2e**
Emission Factors	0.02149	0.00430	529.70686	531.52468

- Vehicle Exhaust & Worker Trips Criteria Pollutant Emission Factors (grams/mile)

	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**NH_3**
LDGV	0.27609	0.00218	0.12178	3.79856	0.02447	0.00866	0.05040
LDGT	0.23921	0.00276	0.17764	3.57369	0.02568	0.00997	0.04252
HDGV	0.71975	0.00596	0.59748	9.23862	0.05390	0.02724	0.08822
LDDV	0.13619	0.00126	0.17084	5.56590	0.02390	0.00790	0.01651
LDDT	0.19962	0.00128	0.31331	3.89296	0.02380	0.00917	0.01633
HDDV	0.13562	0.00431	2.68972	1.58994	0.16457	0.08045	0.06649
MC	2.26849	0.00263	0.67135	11.95222	0.03300	0.02243	0.05372

- Vehicle Exhaust & Worker Trips Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	**N_2O**	**CO_2**	**CO_2e**
LDGV	0.01692	0.00502	322.38935	324.19269
LDGT	0.01782	0.00721	406.86372	409.27251
HDGV	0.05058	0.02477	880.13963	888.12101
LDDV	0.05963	0.00070	373.68435	375.53868
LDDT	0.03836	0.00102	380.71023	382.05430
HDDV	0.03446	0.16397	1281.73246	1326.15000

MC	0.10954	0.00301	393.48870	397.35238

2.5.4 Paving Phase Formula(s)

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * HP * LF * EF_{POL} * 0.002205) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
HP: Equipment Horsepower
LF: Equipment Load Factor
EF_{POL}: Emission Factor for Pollutant (g/hp-hour)
0.002205: Conversion Factor grams to pounds
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase
$VMT_{VE} = PA * 0.25 * (1 / 27) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
PA: Paving Area (ft^2)
0.25: Thickness of Paving Area (ft)
(1 / 27): Conversion Factor cubic feet to cubic yards (1 yd^3 / 27 ft^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)

VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Off-Gassing Emissions per Phase
$VOC_P = (2.62 * PA) / 43560 / 2000$

VOC_P: Paving VOC Emissions (TONs)
2.62: Emission Factor (lb/acre)
PA: Paving Area (ft^2)
43560: Conversion Factor square feet to acre (43560 ft2 / $acre)^2$ / acre)
2000: Conversion Factor square pounds to TONs (2000 lb / TON)

3. Personnel

3.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location
County: Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Employess

- Activity Description:
Employess

- Activity Start Date
Start Month: 1
Start Year: 2029

- Activity End Date
Indefinite: Yes
End Month: N/A
End Year: N/A

- Activity Emissions of Criteria Pollutants:

Pollutant	Emissions Per Year (TONs)
VOC	0.187115
SO_x	0.001652
NO_x	0.088262
CO	2.324648

Pollutant	Emissions Per Year (TONs)
PM 10	0.016455
PM 2.5	0.006492
Pb	0.000000
NH_3	0.028719

- Global Scale Activity Emissions of Greenhouse Gasses:

Pollutant	Emissions Per Year (TONs)
CH_4	0.011596
N_2O	0.003992

Pollutant	Emissions Per Year (TONs)
CO_2	244.144552
CO_2e	245.527140

3.2 Personnel Assumptions

- Number of Personnel
Active Duty Personnel: 0
Civilian Personnel: 60

Support Contractor Personnel: 0
Air National Guard (ANG) Personnel: 0
Reserve Personnel: 0

- Default Settings Used: No

- Average Personnel Round Trip Commute (mile): 40

- Personnel Work Schedule
Active Duty Personnel: 5 Days Per Week
Civilian Personnel: 5 Days Per Week
Support Contractor Personnel: 5 Days Per Week
Air National Guard (ANG) Personnel: 4 Days Per Week
Reserve Personnel: 4 Days Per Month

3.3 Personnel On Road Vehicle Mixture

- On Road Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	37.55	60.32	0	0.03	0.2	0	1.9
GOVs	54.49	37.73	4.67	0	0	3.11	0

3.4 Personnel Emission Factor(s)

- On Road Vehicle Criteria Pollutant Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	NH_3
LDGV	0.26152	0.00203	0.09271	3.40096	0.02280	0.00843	0.04632
LDGT	0.21720	0.00263	0.13336	3.10739	0.02435	0.00966	0.03859
HDGV	0.61408	0.00576	0.45715	7.45831	0.05068	0.02555	0.08339
LDDV	0.11649	0.00124	0.14194	6.02446	0.02324	0.00798	0.01692
LDDT	0.11716	0.00122	0.16111	2.56110	0.02176	0.00796	0.01596
HDDV	0.10256	0.00408	2.02341	1.45992	0.14503	0.06268	0.06831
MC	2.23682	0.00263	0.66710	11.61465	0.03258	0.02242	0.05459

- On Road Vehicle Greenhouse Gasses Emission Factors (grams/mile)

	CH_4	N_2O	CO_2	CO_2e
LDGV	0.01474	0.00466	299.60379	301.25140
LDGT	0.01528	0.00662	388.03909	390.22146
HDGV	0.04364	0.02231	850.03162	857.16511
LDDV	0.06123	0.00070	368.19922	370.09805
LDDT	0.03760	0.00102	363.40738	364.73047
HDDV	0.03405	0.16800	1215.53541	1261.00911
MC	0.10584	0.00300	393.59074	397.34823

3.5 Personnel Formula(s)

- Personnel Vehicle Miles Travel for Work Days per Year
$VMT_P = NP * WD * AC$

VMT_P: Personnel Vehicle Miles Travel (miles/year)
NP: Number of Personnel
WD: Work Days per Year
AC: Average Commute (miles)

- Total Vehicle Miles Travel per Year
$VMT_{Total} = VMT_{AD} + VMT_{C} + VMT_{SC} + VMT_{ANG} + VMT_{AFRC}$

VMT_{Total}: Total Vehicle Miles Travel (miles)
VMT_{AD}: Active Duty Personnel Vehicle Miles Travel (miles)
VMT_{C}: Civilian Personnel Vehicle Miles Travel (miles)
VMT_{SC}: Support Contractor Personnel Vehicle Miles Travel (miles)
VMT_{ANG}: Air National Guard Personnel Vehicle Miles Travel (miles)
VMT_{AFRC}: Reserve Personnel Vehicle Miles Travel (miles)

- Vehicle Emissions per Year
$V_{POL} = (VMT_{Total} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{Total}: Total Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Personnel On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

4. Heating

4.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location
County: Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Heating

- Activity Description:
5 Buildings

- Activity Start Date
Start Month: 1
Start Year: 2030

- Activity End Date
Indefinite: Yes
End Month: N/A
End Year: N/A

- Activity Emissions of Criteria Pollutants:

Pollutant	Emissions Per Year (TONs)
VOC	0.401238
SO_x	0.043771
NO_x	7.295238
CO	6.128000

Pollutant	Emissions Per Year (TONs)
PM 10	0.554438
PM 2.5	0.554438
Pb	0.000000
NH_3	0.000000

- Global Scale Activity Emissions of Greenhouse Gasses:

Pollutant	Emissions Per Year (TONs)

Pollutant	Emissions Per Year (TONs)

CH_4	0.164872
N_2O	0.164872

CO_2	8755.671810
CO_2e	8803.979417

4.2 Heating Assumptions

- Heating
Heating Calculation Type: Heat Energy Requirement Method

- Heat Energy Requirement Method
Area of floorspace to be heated (ft^2): 1000000
Type of fuel: Natural Gas
Type of boiler/furnace: Commercial/Institutional (0.3 - 9.9 MMBtu/hr)
Heat Value ($MMBtu/ft^3$): 0.00105
Energy Intensity ($MMBtu/ft^2$): 0.1532

- Default Settings Used: Yes

- Boiler/Furnace Usage
Operating Time Per Year (hours): 900 (default)

4.3 Heating Emission Factor(s)

- Heating Criteria Pollutant Emission Factors (lb/1000000 scf)

VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3
5.5	0.6	100	84	7.6	7.6		

- Heating Greenhouse Gasses Pollutant Emission Factors (lb/1000000 scf)

CH_4	N_2O	CO_2	CO_2e
2.26	2.26	120019	120143

4.4 Heating Formula(s)

- Heating Fuel Consumption ft^3 per Year
$FC_{HER} = HA * EI / HV / 1000000$

FC_{HER}: Fuel Consumption for Heat Energy Requirement Method
HA: Area of floorspace to be heated (ft^2)
EI: Energy Intensity Requirement ($MMBtu/ft^2$)
HV: Heat Value ($MMBTU/ft^3$)
1000000: Conversion Factor

- Heating Emissions per Year
$HE_{POL} = FC * EF_{POL} / 2000$

HE_{POL}: Heating Emission Emissions (TONs)
FC: Fuel Consumption
EF_{POL}: Emission Factor for Pollutant
2000: Conversion Factor pounds to tons

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to estimate GHG emissions associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the *Environmental Impact Analysis Process* (EIAP, 32 CFR 989); and the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the GHG emissions analysis.

Report generated with ACAM version: 5.0.24a

a. Action Location:

Base: GREATER PEORIA REGIONAL AIRPORT
State: Illinois
County(s): Peoria
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: SVADA BRAC EA

c. Project Number/s (if applicable): SVADA BRAC EA

d. Projected Action Start Date: 1 / 2026

e. Action Description:

Cumulative effects:
Construction-
Project Name Construction SF Footprint SF Staging Area SF Parking SF Landscaping Utilities Total SF Ground Disturbance
Conveyor system, 10,500 ft x 2 ft (LRA Parcel 20 and Brickhouse Slough) 21,000 21,000 4,200 6,300 5,250 2,100 38,850
Dry and liquid bulk wharf, 800-ft x 100-ft (Brickhouse Slough) 40,000 40,000 8,000 12,000 10,000 4,000 74,000
Floating dry dock, 120 ft x 80 ft (Brickhouse Slough) 28,000 28,000 5,600 8,400 7,000 2,800 51,800
LOLO wharf, 350 ft x 50 ft (this is also included in the L-shaped LOLO wharf listed below) 87,000 87,000 17,400 26,100 21,750 8,700 160,950
L-shaped LOLO wharf, 600 ft x 50 ft and 290 ft x 75 ft 51,000 51,000 10,200 15,300 12,750 5,100 94,350
Recreational parking area (existing, unpaved) - - - - - 10,000
Recreational boat ramp for canoes/kayaks, 75 ft x 70 ft 15,750 15,750 3,150 4,725 3,938 1,575 29,138
Recreational boat ramp access trail for canoes/kayaks (elevated boardwalk), 300 ft x 10 ft 10000 10,000 2,000 3,000 2,500 1,000 18,500
Recreational trail (elevated boardwalk), 9,500 ft x 10 ft 10,000 10,000 2,000 3,000 2,500 1,000 18,500
Recreational area or solar PV arrays atop capped landfill, 675 ft x 755 ft 1 1 0 0 0 0 180,000
Repair fleeting area, 450 ft x 120 ft - - - - - 54,000
Travel lift piers (two at 200 ft x 20 ft) with a landside dry dock (750 ft x 65 ft) 487,500 487,500 97,500 146,250 121,875 48,750 414,375
Wharf access road, 425 ft x 40 ft (LRA Parcel 20 and Brickhouse Slough) 17000 17,000 3,400 5,100 4,250 1,700 31,450
Dredging Cumulative dredge volume by phase (yd3)
1,237,450

f. Point of Contact:

Name: Dewey
Title: Cooper

Organization: TT
Email:
Phone Number:

2. Analysis: Total combined direct and indirect GHG emissions associated with the action were estimated through ACAM on a calendar-year basis from the action's start through the action's "steady state" (SS, net gain/loss in emission stabilized and the action is fully implemented) of emissions.

GHG Emissions Analysis Summary:

GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). These three GHGs represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO2 equivalents (CO2e). The CO2e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP allows comparison of global warming impacts between different gases; the higher the GWP, the more that gas contributes to climate change in comparison to CO2. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and/or Air Emissions Guide for Air Force Transitory Sources.

The Air Force has adopted the Prevention of Significant Deterioration (PSD) threshold for GHG of 75,000 ton per year (ton/yr) of CO2e (or 68,039 metric ton per year, mton/yr) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. This indicator does not define a significant impact; however, it provides a threshold to identify actions that are insignificant (de minimis, too trivial or minor to merit consideration). Actions with a net change in GHG (CO2e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Note that actions with a net change in GHG (CO2e) emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact. For further detail on insignificance indicators see Level II, Air Quality Quantitative Assessment, Insignificance Indicators (April 2023).

The following table summarizes the action-related GHG emissions on a calendar-year basis through the projected steady state of the action.

Action-Related Annual GHG Emissions (mton/yr)						
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**	**Threshold**	**Exceedance**
2026	8,424	0.31563392	0.31548051	8,516	68,039	No
2027	8,347	0.31250401	0.31407083	8,439	68,039	No
2028	7,764	0.29079201	0.29023113	7,849	68,039	No
2029	7,986	0.30131214	0.29385236	8,072	68,039	No
2030	15,929	0.45088189	0.44342211	16,059	68,039	No
2031	8,164	0.16008988	0.15319098	8,210	68,039	No
2032 [SS Year]	8,164	0.16008988	0.15319098	8,210	68,039	No

The following U.S. and State's GHG emissions estimates (next two tables) are based on a five-year average (2016 through 2020) of individual state-reported GHG emissions (Reference: State Climate Summaries 2022, NOAA National Centers for Environmental Information, National Oceanic and Atmospheric Administration. https://statesummaries.ncics.org/downloads/).

State's Annual GHG Emissions (mton/yr)				
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**
2026	195,748,919	671,846	75,058	234,450,991
2027	195,748,919	671,846	75,058	234,450,991

2028	195,748,919	671,846	75,058	234,450,991
2029	195,748,919	671,846	75,058	234,450,991
2030	195,748,919	671,846	75,058	234,450,991
2031	195,748,919	671,846	75,058	234,450,991
2032 [SS Year]	195,748,919	671,846	75,058	234,450,991

U.S. Annual GHG Emissions (mton/yr)				
YEAR	**CO2**	**CH4**	**N2O**	**CO2e**
2026	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2027	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2028	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2029	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2030	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2031	5,136,454,179	25,626,912	1,500,708	6,251,695,230
2032 [SS Year]	5,136,454,179	25,626,912	1,500,708	6,251,695,230

GHG Relative Significance Assessment:

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (Rtba.e., global, national, and regional) and the degree (intensity) of the proposed action's effects. The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative's annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

The action's surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, context of an action is the local area's ambient air quality relative to meeting the NAAQSs, expressed as attainment, nonattainment, or maintenance areas (this designation is considered the attainment status). GHGs are non-hazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can only potentially cause warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact to local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action's GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance, based on their annual net change in GHG emissions, in relation to or proportionally to the global, national, and regional annual GHG emissions.

To provide real-world context to the GHG and climate change effects on a global scale, an action's net change in GHG emissions is compared relative to the state (where the action will occur) and U.S. annual emissions. The following table provides a relative comparison of an action's net change in GHG emissions vs. state and U.S. projected GHG emissions for the same time period.

Total GHG Relative Significance (mton)					
		CO2	**CH4**	**N2O**	**CO2e**
2026-2032	State Total	1,370,242,436	4,702,920	525,407	1,641,156,935
2026-2032	U.S. Total	35,955,179,253	179,388,382	10,504,953	43,761,866,607
2026-2032	Action	64,778	1.991304	1.963439	65,354
Percent of State Totals		0.00472751%	0.00004234%	0.00037370%	0.00398222%
Percent of U.S. Totals		0.00018016%	0.00000111%	0.00001869%	0.00014934%

From a global context, the action's total GHG percentage of total global GHG for the same time period is: 0.00002001%.*

* Global value based on the U.S. emitting 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, https://www.c2es.org/content/international-emissions).