



# U.S. Department of the Interior Bureau of Land Management

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## Environmental Assessment Campbell Creek Science Center Biomass Unit Retrofit Bureau of Land Management

DOI-BLM-AK-A010-2010-0002-EA



### Location:

T. 12 N., R. 3 W., Sec. 3, Seward Meridian  
Campbell Tract, Anchorage, Alaska

### Prepared By:

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Outdoor Recreation Planner  
December 11, 2009

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## I. INTRODUCTION

### A) BACKGROUND

The Campbell Tract Facility (CTF) is a 730 acre Bureau of Land Management (BLM) Administrative Site of natural, mostly wooded, public land located within the city limits of the Municipality of Anchorage (MOA). The primary purpose of the CT is to support the administrative functions and offices for the Anchorage Field Office (AFO) of the BLM. The CT is centered around the Campbell Airstrip, a 5,000' gravel runway dating to 1942, that is actively used by the AFO and other agencies for government purposes.

The Campbell Creek Science Center (CCSC), located on the CTF, provides educational opportunities for adults, children, and families. Many CCSC programs focus on environmental education, renewable energy, and energy conservation. The most recent CCSC annual visitation count was 41,700. The approximately 10,000 square-foot facility houses a classroom, multipurpose room, staff office space, and kitchen. The facility is in operation 12 months a year and also has two 240 square-foot maintenance sheds located behind the facility that require heated storage and regular access. The facility classrooms and kitchen are available to rent for group events and meetings.

In 2005, the CCSC initiated a pilot demonstration project to install a hydronic heater (also referred to as an outdoor wood boiler, or OWB) as a way to provide public education about this form of heat energy that utilizes wood that is renewable and locally available. The “Central Boiler” brand OWB unit was installed in 2005 and designed to partially heat the CCSC facility and two adjacent maintenance sheds (photo 1.1). OWBs have become very popular in the recent past since the price of heating oil has increased.

Photo 1.1



The recently revised National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM<sub>2.5</sub>) recognize the public health danger of excessive fine particulate matter. OWBs emit significantly more particulate matter than other wood burning devices. Because OWBs are designed to respond to the thermostatic setting by smoldering when less heat is required, they produce heavy smoke emissions more often than most other wood combustion devices. Even when operated using clean seasoned wood, OWBs can emit significant pollution because the basic design of the OWB causes fuel to burn incompletely, or smolder, resulting in thick smoke and high particulate emissions (NESCAUM, 2006).

In 2006, a committee was formed under the American Society for Testing and Materials (ASTM) to develop a standard test protocol for hydronic heaters. The standards included uniform procedures for determining performance and emissions. Results of their tests of three common units demonstrated low efficiencies (25%) and high emissions (Parrent, 2006).

In 2007, the Environmental Protection Agency (EPA) adopted ASTM testing standards and launched a voluntary program to make cleaner hydronic heaters available for consumers. During the first phase of the program, some manufacturers redesigned 15 units that qualified under certain EPA-identified criteria to be 70 percent cleaner than other unqualified models, and emit a maximum of 0.60 lbs of particle pollution per million (ppm) BTU heat **input**. In 2008, the EPA went even further with a phase 2 program aimed at making models available that are 90 percent cleaner than unqualified units. Six of the 15 phase one approved “hydronic heaters” already met phase 2 levels, 10 units are currently on the existing phase 2 list, and manufacturers have indicated they will produce more phase 2 units into the future. The maximum emissions standard for phase 2 is 0.32 lbs of ppm BTU heat **output**, thus creating an efficiency standard as well (EPA, 2008).

A “phase 2 emission level qualified model” is a model that achieves an average emissions level of 0.32 lbs/million Btu heat output or less for all fuel types listed in the owner’s manual and/or mentioned in marketing/sales materials, and that did not exceed 18.0 grams/hr of fine particles in any individual test run that was used in the calculation of the average (EPA, 2008).

Even when used properly, OWBs emit, on an average per hour basis, about four times as much fine particulate matter pollution as conventional wood stoves, about 12 times as much fine particle pollution as EPA-certified wood stoves, 1000 times more than oil furnaces, and 1800 times more than gas furnaces.

The unit installed at the BLM CCSC in 2005 was not designed to be a primary heat source, nor does it meet current phase 2 EPA emissions or efficiency standards for hydronic heaters. The BLM’s Anchorage Field Office (AFO) proposes to retrofit and upgrade the existing unit to a more modern one that is high efficiency, low emission (HELE). The proposed HELE replacement hydronic heater, a GARN ® or equivalent unit, would offer storage capacity and require being housed inside a building therefore; it cannot be tested under the EPA’s phase 1 or 2 program due to the definition of a “hydronic heater.” The EPA is in the process of developing a separate “indoor hydronic heater with storage” category and test standards. Though it cannot be tested under the existing EPA qualification programs,

emissions test data available for the GARN® unit demonstrate that it already exceeds the EPA phase 2 emissions for hydronic heaters (Parrent, 2006).

#### **B) PURPOSE AND NEED FOR ACTION**

BLM AFO developed the initial Proposed Action for the first biomass unit in 2005 based upon agency direction to increase utilization of biomass from the BLM Biomass Utilization Strategy (IM 2004-227). The original project intent to create a secondary source of heat for the CCSC and raise public awareness about this renewable technology has been achieved over the past four years.

The BLM also has direction, under the Ring of Fire Resource Management Plan (2008), to “protect and enhance the quality of air resources within the planning area.” The existing unit does not meet current EPA phase 2 hydronic heater emissions standards due to its high level of smoke emissions and low efficiency. The BLM AFO has a responsibility to reduce emissions and a need to increase efficiency with the proposed upgrade to a HELE hydronic heater or indoor hydronic heater that would serve as the primary source of heat.

#### **C) ISSUES AND DECISION TO BE MADE**

Staff members within the Anchorage Field Office, Anchorage District Office, have raised the following issues and concerns after reviewing the proposal: (1) Potential for particulate emissions and impact upon air quality.

The project was listed on the Anchorage Field Office websites’ NEPA register in early November, 2009. No public comment has been received to date, however, this proposal addresses public and employee concern over air quality at CCSC and surrounding trails and outdoor education areas.

This EA will provide the information necessary to evaluate the impacts associated with the Proposed Action and no action alternative. The decision-maker will take into account technical, economic, environmental, and social issues and the purpose and need of the proposed project. The BLM NEPA analysis will evaluate whether the proposed project should be approved, rejected, or modified, and if additional mitigation is necessary.

#### **D) REQUIRED PERMITS AND LICENSES**

All BLM authorized actions are to comply with both Federal and State air quality laws and regulations. The Clean Air Act of 1970 authorized the EPA to establish National Ambient Air Quality Standards (40 CFR Part 60) for air pollutants that pose a risk to human health. These standards were adopted by reference and applied to the State of Alaska Administrative Code (18 AAC 50.326 (g) 9), whereby Title V air permit applications are required only for significant emission units.

Preliminary BLM engineering emissions estimates for the proposed unit replacement would require application for a Title V air permit application. In early February, 2010 final construction and design drawings and specifications will be available for the proposed HELE unit. As soon as these specifications are available, BLM engineering staff will submit the appropriate Title V air permit application materials.

### **E) RELATIONSHIP TO STATUTES, REGULATIONS, POLICIES, PLANS OR OTHER ENVIRONMENTAL ANALYSES**

The area within which the Proposed Action would take place is covered by the following planning and environmental document(s):

Ring of Fire Record of Decision and Approved Management Plan – Anchorage Field Office, Alaska, dated March 2008.

The Proposed Action is consistent with the objectives outlined in the document and is not in conflict with other resources in the area. The document (BLM, p. RMP-4, 2008) dictates that the BLM would aim to achieve the air resource goal to “protect and enhance the quality of air resources within the planning area.” The intent of the Proposed Action to reduce emissions would achieve this goal. Additionally, the Ring of Fire Record of Decision and Resource Management Plan (BLM, RMP-15, 2008), also directs that management of the Campbell Tract Facility SRMA would continue to be guided by *A Management Plan for Public Use and Resource Management on the Bureau of Land Management Campbell Tract Facility* (1988). The Proposed Action is also in conformance with the direction provided in this Management Plan (1988).

There are no additional statutory or regulatory provisions, as well as municipal or state land use plans that would be affected by this proposal.

### **F) LAND STATUS AND ADJACENT USES**

The CT is under the jurisdiction of the BLM by withdrawal from the Federal public domain for BLM administrative use as directed by PLO 7471 which expires in 2022.

## **II. PROPOSED ACTION AND ALTERNATIVES**

This section describes the Proposed Action in sufficient detail to analyze the impacts. The descriptions include all design features and discrete actions which have the potential to affect the environment, including those intended to avoid or minimize adverse environmental impacts.

### **A) ALTERNATIVES CONSIDERED, BUT NOT ANALYZED IN DETAIL**

The purpose for the heating system retrofit and replacement is driven by the desire to have a hydronic heater function as the primary heat source and to reduce emissions. The very recent EPA changes in efficiency qualifications subsequent to the installation of the existing unit in 2005 have made more HELE units available. In order to achieve improved emissions and efficiency, there have been no other alternatives considered aside from attaining a unit that will serve as the primary heat source as well as meet or exceed the emissions and efficiency standards of the EPA’s phase 2 program.

### **B) NO ACTION ALTERNATIVE**

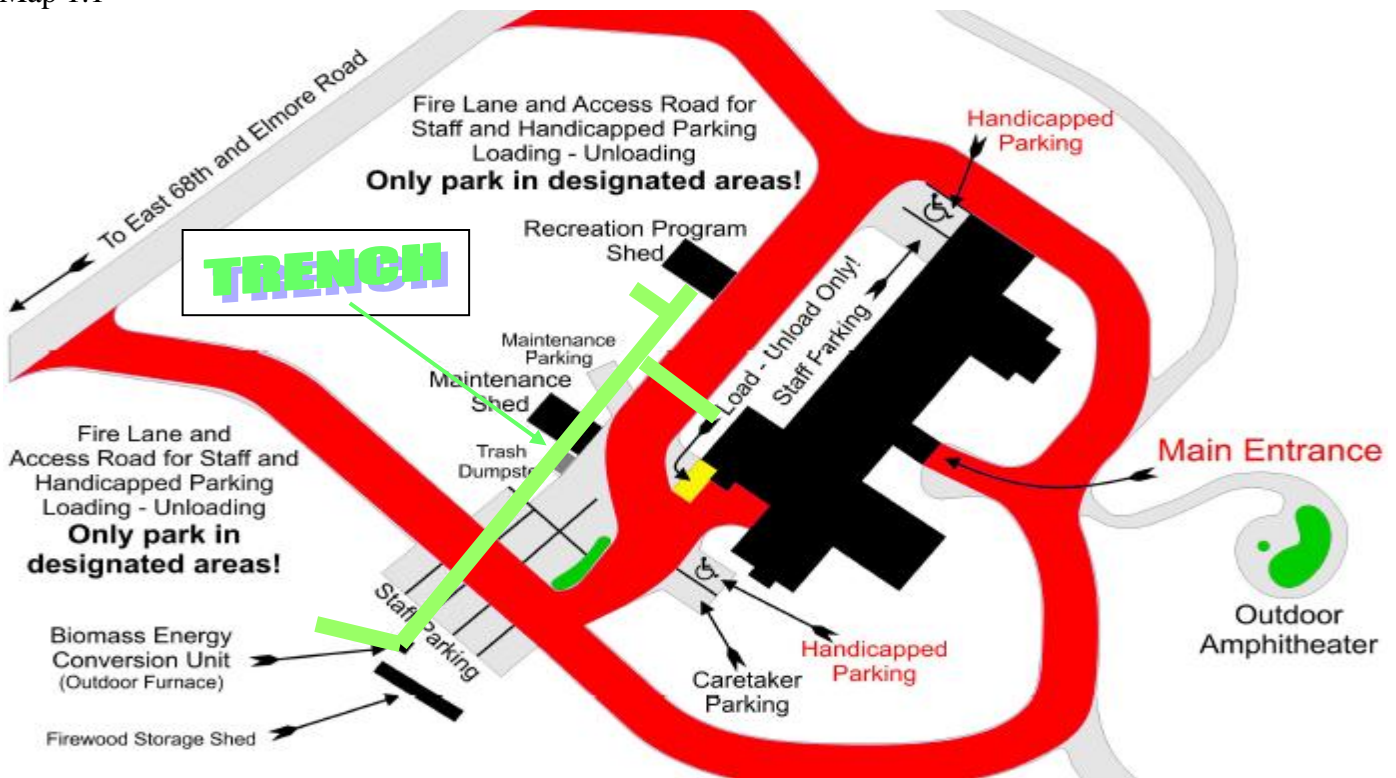
Under the no action alternative, the BLM AFO would continue to use the existing hydronic heater unit as a secondary heating source. The BLM CTF and surrounding neighbors would continue to experience the same high emissions and low efficiency received from this unit.

**C) PROPOSED ACTION**

The purpose of the Proposed Action is to replace the existing hydronic heater with a HELE unit that meets or exceeds EPA phase 2 hydronic heater standards or indoor hydronic heater standards. The unit would also serve as the *primary* source of heat for the CCSC. Natural gas would remain as secondary heat. The location of the new unit would be 100 feet behind the existing unit.

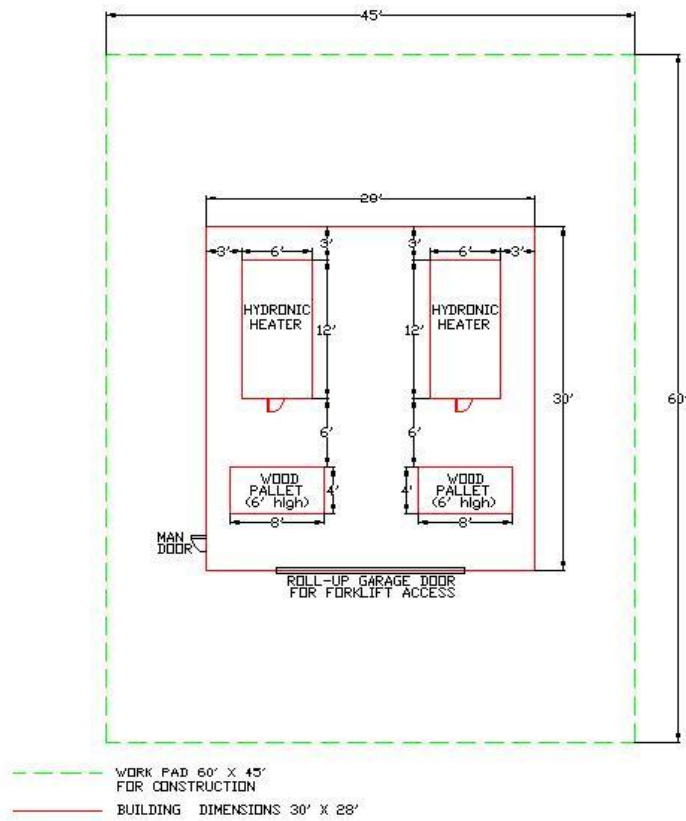
In order to accommodate delivery of the heated liquid from the heater unit to the CCSC, a 300 foot trench would be excavated. The majority of the trench would be a re-excitation where existing supply lines lie, underneath asphalt. There would be up to 20 feet of new trench excavated. In addition, a new building would be constructed to accommodate the new indoor hydronic heater. The structure would be located southwest of the existing unit and measure 30 feet long by 28 feet wide (Map 1.1).

Map 1.1



The total footprint of the work pad would be 60 feet long by 45 feet wide and require the removal of up to 8 mature birch and 5 mature spruce trees in addition to ground cover and smaller vegetation (Drawing 1.1, Picture 1.2).

Drawing 1.1



Picture 1.2



In early February, 2010 final construction and design drawings and specifications will be available for the proposed new HELE unit. As soon as these drawings are available, the contract process will begin for construction of the proposed building and associated delivery system for operation by September, 2010.

### III. AFFECTED ENVIRONMENT

The CTF is located within the Cook Inlet Taiga ecoregion, which surrounds the upper reaches of Cook Inlet in south central Alaska, and is surrounded by the Chugach Mountains. The relatively mild climate, level to rolling topography, and coastal marine influence contribute to the wide variety of vegetation communities found in the ecoregion. The most widespread are coniferous, broadleaf, and mixed forests, dominated in differing combinations by black spruce (*Picea mariana*), white spruce (*P. glauca*), Sitka spruce (*P. sitchensis*), quaking aspen (*Populus tremuloides*), balsam poplar (*P. balsamifera*), black cottonwood (*P. trichocarpa*) and paper birch (*Betula papyrifera*) (Gallant et al. 1995). Other important communities include low scrub, tall scrub, low scrub bog, mesic graminoid, graminoid herbaceous, and wet forb herbaceous communities.

In upland areas, the dominant vegetation type is spruce birch forest. This consists of white spruce and

paper birch as the dominant tree species with some aspen and black spruce. A tall under story of willow and alder are typically present. Labrador tea, low bush cranberry, dwarf dogwood and bluejoint grass are likely present in the low under story. A wide variety of forbs, mosses, and lichens are also present on the forest floor.

The CTF was under Department of Defense jurisdiction during World War II. A 5,000 acre Army garrison was stationed at the Campbell Tract, which then included an air field, barracks, an officer's quarters, a recreation hall, a mess hall, an aid station and several storage huts. While there are few remnants of these facilities, the airstrip and taxiways are essentially the same as when they were constructed in 1942. As such, there are few to no acres at the CTF that have not been manipulated in some fashion since 1942. The airstrip remains in use today by the BLM to support field operations.

The CTF is mostly wooded public land located within the city limits of the Municipality of Anchorage. It is adjoined to north, east and south by Far North Bicentennial Park, the MOA Heritage Land Bank lands, and collectively total approximately 5000 contiguous acres of forested landscape linking the high mountains of Chugach State Park to the heart of Anchorage. All of this land, in addition to two large military installations, provides a significant land base to provide the ecological and social benefits of the forested ecosystem.

#### **IV. ENVIRONMENTAL EFFECTS**

This section provides the evaluation of direct, indirect, and cumulative environmental impacts related to the Proposed Action and no action alternative only, since no additional alternatives were analyzed in detail. Impacts may be to society, the economy, or the biological or physical environment. Any issues or concerns raised by Bureau staff are discussed below. If these resulted in any measures to mitigate the environmental impacts, those measures are also discussed in this section. Finally, any residual impacts to the environment, despite applications of mitigation measures, are identified here.

##### **A) AIR QUALITY**

Air quality is determined by atmospheric emissions and pollutants, and includes noise, smoke management, and visibility. Certain activities, programs, and projects initiated by the BLM, as well as operator-initiated activities and projects that BLM authorizes, may have the potential to affect air quality conditions. Therefore, where appropriate, BLM must analyze the potential effects of BLM and BLM-authorized activities on air quality as part of the planning, environmental review, and decision making processes. (BLM 7300 Manual, 2009).

Even when used properly, the existing OWB, installed in 2005, could emit, on an average per hour basis, about four times as much fine particulate matter pollution as conventional wood stoves, about 12 times as much fine particle pollution as EPA-certified wood stoves, 1000 times more than oil furnaces, and 1800 times more than gas furnaces.

The effect of the Proposed Action upon air quality includes a reduction in particulate emissions (PM 2.5) from a maximum of 0.60 lbs of particle pollution per million (ppm) BTU heat input to a maximum of 0.32 lbs of ppm BTU heat output. This reduced particulate emissions rate can continue to be realized

into the future by following requirements in the operation manual provided by the HELE unit manufacturer, including utilizing fuelwood that has been properly seasoned.

The effect of the no action alternative on air quality would include a continued release of high emissions and associated short and long-term health effects experienced due to fine particulate matter pollution.

NESCAUM (2006) measured emissions from an OWB unit in the field under real world conditions. Their test data indicated that the smallest OWB is likely to have an average in-use emission rate of approximately 161 grams of fine particulate matter per hour, which is twenty times higher than the average in-use emissions of an EPA certified wood stove. This report utilizes a gram per hour measurement in order to understand the potential ambient impacts and to make comparisons to other residential furnaces and heating units such as oil-fired furnaces, natural gas furnaces, and residential wood stoves.

Based on NESCAUM (2006) test results, the average fine particulate emissions from one OWB are equivalent to the emissions from 22 EPA certified wood stoves, 205 oil furnaces, or as many as 8,000 natural gas furnaces. To put these emissions into perspective, one OWB can emit as much fine particulate matter as four heavy duty diesel trucks on a grams per hour basis. Cumulatively, the smallest OWB has the potential to emit almost one and one-half tons of particulate matter every year. (NESCAUM, 2006).

These data (NESCAUM, 2006) suggest that buildings located near OWBs can experience high (PM2.5) emission levels during typical boiler operating conditions. Health studies have found associations of acute and chronic exposure to wood smoke with adverse health outcomes such as increases in respiratory symptoms, decreases in lung function, emergency room visits, and even hospitalization.

#### **B) INVASIVE, NON-NATIVE SPECIES**

The effect of the Proposed Action upon existing vegetation includes an increased threat of invasive, non-native species introduction during the proposed project's construction phase. Measures to decrease this threat include a required cleaning of all construction vehicles and equipment used in construction, maintenance and operations of project **prior to** moving equipment onto BLM managed lands. Washing and/or brushing equipment to remove material that can contain weed seeds or other propagates would help to insure that the equipment is weed and weed seed free. Additionally, site reclamation should be implemented as soon as possible after construction using the original duff layer. The original duff layer should be removed and set aside upon initial site disturbance, and replaced on disturbed grounds as much as possible in lieu of revegetation with non-local materials.

#### **C) HAZARDOUS MATERIALS**

The effect of the Proposed Action upon the existing environment includes threats associated with improper management of associated hazardous materials. The associated hazardous materials include glycol, petroleum, creosote, and wood ash.

Operation of the biomass unit will require a fairly large volume of heat-exchange liquid – probably polypropylene glycol, but other forms of glycol may be employed. Risk of release of glycol from damaged piping or spills during biomass installation/maintenance is present. While polypropylene glycol is not listed as a hazardous material, release of any form of glycol to surface or subsurface that is not promptly cleaned up will increase the Biological Oxygen Demand (BOD) in surface or ground water. Increase in BOD reduces available oxygen in the water. Only propylene glycol should be accepted as the heat exchange fluid to avoid use of a regulated material such as ethylene glycol. Frequent monitoring of fluid levels within the system will be needed to provide early notice of loss of fluid due to leaks in piping.

The firewood cutting process will require use of power equipment for cutting & splitting wood nearby the proposed location of the new HELE unit. Risk of release of oil (gas/diesel/motor oil/2-cycle oil, etc.) exists from storage, refueling, and operating. During construction of the biomass system there could be oil spills caused by equipment breakdown (hydraulic hose failure, etc.) or spills of gasoline/diesel fuel during refueling. To mitigate these issues, fuel and oils should be stored within a containment device that provides 100% containment of the largest single package stored within. An appropriately sized spill response kit should be on-hand at the wood cutting area for rapid spill response. Person(s) involved in the wood cutting procedure should be trained appropriately for spill prevention and response. The contractor installing the system should have appropriate spill response capability on-hand at the work site, to include spill response materials and employee training.

Creosote build-up from burning wood may occur in the chimney and/or emissions vent for the HELE unit, which may require periodic cleaning and disposal. Creosote from wood burning does contain some levels of hazardous chemicals, but is not regulated by State of Alaska or the Environmental Protection Agency as a hazardous substance or waste. Moderate quantities of wood ash would be produced by the proposed HELE unit, which would require removal and disposal several times per year. Ash presents a nuisance dust type hazard. BLM employees charged with cleaning the creosote and ash from the HELE unit would wear adequate personal protective equipment to include appropriate respiratory protection. Waste removed from the unit would be containerized as it is removed and then properly disposed in a permitted solid waste facility (municipal landfill).

#### **D) VEGETATION**

The effect of the Proposed Action upon the existing vegetation would include clearing an area for the building footprint, entailing the removal of up to 8 mature birch and 5 mature spruce trees as well as smaller vegetation and ground cover. The affected land area would be 2,700 sq. ft., or equal to approximately 0.06 acres. Surrounding public land ownerships provide a significant land base to provide the ecological benefits of the forested ecosystem therefore, the environmental impact of the Proposed Action upon the local vegetation is considered insignificant.

#### **E) CULTURAL RESOURCES**

The proposed project would occur within the boundaries of Campbell Garrison (ANC-01384) which has been determined eligible to the National Register of Historic Places. The location is in an area highly disturbed by the WWII construction of a major airstrip taxiway. In other areas this is a prime spot to

find foxholes, however, no foxholes have been observed in this section. A qualified archeologist has inspected the area for this, and previous nearby projects, and found no cultural resources

#### **F) THREATENED AND ENDANGERED SPECIES**

There is no effect of the Proposed Action upon any threatened or endangered species or their habitats. No consultation with the U. S. Fish and Wildlife Service is considered necessary pursuant to Section 7 of the Endangered Species Act.

#### **G) ANILCA §810 SUBSISTENCE**

The CTF is within the Anchorage Game Management Area, consisting of all the drainages south of Elmendorf Air Force Base and Fort Richardson military reservations and north to Rainbow Creek in Game Management Unit 14. Since this area is closed to the subsistence taking of wildlife at this time, the Proposed Action will not significantly restrict Federal subsistence uses, decrease the abundance of Federal subsistence resources, alter the distribution of Federal subsistence resources, or limit Federal subsistence user access from currently existing conditions. Additionally, the Proposed Action does not affect Federal navigable or non-navigable waters on the Campbell Creek Tract.

#### **H) VISUAL RESOURCE**

Visual effects associated with the Proposed Action would be minimal and mitigated by retaining as much vegetation as possible for visual screening. A berm currently exists that would provide partial visual screening from traffic along the CCSC Road. The Proposed Action would already occur in a developed area that contains a wood shed, stacked firewood, a firewood processing area, associated hardened ground, vehicle parking and parking barriers, asphalt, nearby storage sheds, and the existing biomass unit. It is an area currently dominated by facility structures.

No visual resource inventory has been conducted for the CTF. The lands do however, fall under the direction within the Ring of Fire Management Plan. Visual Resource Management (VRM) direction for the CTF lands fall under the VRM Class IV objective that “provides for management activities that would make major modifications to the existing character of the landscape; [whereby] change may be very high and while reflecting the basic elements of the landscape, may dominate the view.” The Proposed Action is consistent with this objective.

## **V. TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED**

The State Air Quality office was contacted for information regarding air quality permits.

## **VI. LIST OF PREPARERS**

Larry Beck, Environmental Protection Specialist  
 Donna Redding, Archaeologist  
 Ben Seifert, Forestry and Fire Specialist  
 Laurie Thorpe, Natural Resource Specialist

Bruce Seppi, Wildlife Biologist  
Jorjena Daly, Outdoor Recreation Planner

## VI. REFERENCES

- Alaska Department of Environmental Conservation, Division of Air Quality, Air Permits Program.  
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Heating In Copper Center and Kenny Lake, Alaska*

**DECISION RECORD**  
**and**  
**FINDING OF NO SIGNIFICANT IMPACT**

I. Decision:

It is my decision to authorize the Campbell Creek Science Center Biomass Unit Retrofit Proposed Action on the Bureau of Land Management's Campbell Tract Facility. Construction shall only occur within the 60 foot long by 45 foot wide footprint, approximately 0.06 acres of ground. Vegetation outside this footprint shall be protected and maintained to offer a visual screening of the constructed building. All construction equipment shall be cleaned prior to entering BLM lands in order to remove material that may contain weeds, weed seeds, or other propagates that would increase the threat of invasive, non-native species introduction. Additionally, construction site reclamation shall utilize the original duff layer removed and set aside upon initiating construction. Use of the original duff layer for post-construction reclamation shall be employed as much as possible in lieu of revegetation with non-local materials.

II. Rationale for the Decision:

The decision to authorize the Campbell Creek Science Center Biomass Unit Retrofit will provide a new unit that will meet or exceed the current EPA phase 2 hydronic heater emissions and efficiency standards. There would be a noticeable decrease in emissions from the existing unit, thus protecting and enhancing the air resource. The new unit will also increase efficiency and through the retrofit, become the primary heat source of the facility. Demand for natural gas will decrease, as it will become the secondary heat source. Continued biomass, or wood, procurement will contribute to fuels reduction in nearby forested areas, thus reducing the threat of wildfire.

The project area lands are within the boundaries of the Ring of Fire Record of Decision and Approved Management Plan, dated March 2008. This action is consistent with the objectives outlined in the document and is not in conflict with other resources in the area. The document dictates that the BLM would aim to achieve the air resource goal to "protect and enhance the quality of air resources within the planning area." Additionally, this plan directs that management of the Campbell Tract Facility SRMA would continue to be guided by *A Management Plan for Public Use and Resource Management on the Bureau of Land Management Campbell Tract Facility* (1988). The Proposed Action is also in conformance with the direction provided in this Management Plan (1988).

III. Finding of No Significant Impact (FONSI):

The proposed action is consistent with existing national environmental policies and objectives as set forth in Section 101 (a) of the National Environmental Policy Act of 1969 (NEPA). Further and based on the analysis of potential environmental impacts contained in the attached environmental assessment, it is my determination that the proposed action does not constitute a major Federal action significantly affecting the

quality of the human environment and that an environmental impact statement is not required.

IV. ANILCA Section 810 Compliance:

The proposed action will not significantly restrict Federal subsistence uses, decrease the abundance of federal subsistence resources, alter the distribution of federal subsistence resources, or limit qualified Federal subsistence user access.

V. Adverse Energy Impact Compliance:

This action has been analyzed as required by Washington Office Instruction Memorandum 2002-053 to determine if it will cause an adverse impact on energy development. The action will not have an adverse direct or indirect impact on energy development, production or distribution. The preparation of a Statement of Adverse Energy Impact is not required.

VI. Compliance and Monitoring Plan: N/A

  
James M. Fincher  
Anchorage Field Office Manager

12/11/2009  
Date