UH Managed lands – Project Proposal

for projects anticipated to be classified as having "Minimal Impact"

Name: Maunakea Observatories Support Services

Brief Descriptive Title of Project: HazMat Storage

Project Description
Consolidate existing HazMat storage lockers into a central location, and construct storage cabinet for lube / hydraulic oil, and acetylene, which are currently stored indoors.

Identified Land Use (see HAR § 13-5-22 through 13-5-25)
P-9 (B1) STRUCTURES, ACCESSORY, Construction or placement of structures accessory to existing facilities or uses.

Identify the existing CDUP this proposal alters or affects, if any
HA-3/4/82-1430

Identify exemption per HAR § 11-200.1-15, if any
Type 3(D): ..."construction and location of single, new, small facilities or structures… ".
"…accessory or appurtenant structures including garages, carports, ….

Tax Map Key(s)
4-4-015:012 - Halepōhaku

Proposed Commencement Date
As soon as approval is granted.

Proposed Completion Date
01 March 2021

Estimated Project Cost
~$10,000

Total size / area of proposed use
~115 square feet of currently paved area.

Project Purpose and Need

The purpose of this project is to address identified safety concerns by consolidating storage of existing HazMat / Flammable storage structures currently placed in various areas around the Utilities base yard into one central location. This activity will also address safety concerns by moving oil storage drums to the outside of the Utilities workshop, away from where hot work (welding, cutting, etc.) is done. The oil drums hold engine and lube oil, transmission fluid, and other hydraulic fluids used for MKSS equipment.

Has professional peer-review occurred
A written inquiry has been submitted to the County of Hawaii to request County guidance regarding requirements for a building permit, if any. The approval application submitted to DLNR will identify County building permit requirements.

Are there any related ongoing, pending, or planned projects associated with this submission?
A used-oil container will be removed from the parcel when the cabinets are in place. Used oil will instead be properly disposed of when generated, minimizing such storage on the parcel.

Existing Conditions at Project Site(s)

Geology, Climate, & Hazards
The Halepōhaku area is located at the base of Maunakea's upper slopes at an elevation of 9,200 feet and has a semi-arid, sub-alpine climate. The proposed activity will occur within existing disturbed use areas (paved lot).

Flora, Fauna, Ecology, Water Resources
No native flora inhabits this area. Regular invasive species monitoring of the project site is conducted by OMKM. No surface water resources are present. No existing native vegetation will be removed or disturbed through this proposed project.

Cultural Resources
The nearest historic property is immediately adjacent to the cinder road along the North-East boundary of the Halepōhaku parcel with the Mauna Kea Forest Reserve (site 10312). No impact to historic properties is anticipated as storage units will be placed on areas already covered with asphalt.

Recreation
The areas are not intended or designed for recreation.

Built Infrastructure
Asphalt covered area adjacent to the general maintenance workshop.

Landscaping & Visual Conditions
The landscape consists of exposed cinder and tephra interspersed with clumps of vegetation. The proposed activity will not affect scenic views from the project area to surrounding areas, nor will the project affect views from surrounding areas.

Description of the Project

The project will involve moving 11 existing storage cabinets/lockers (already stored outdoors adjacent to the hot-work area/vehicle service bay) to a central location as well as having MKSS staff construct a covered storage cabinet for lube oil / hydraulic oil. Dimensions are shown below.

Cabinets to be Relocated

Cabinet	Length	Depth	Height	Comments
1	2' 8”	2’ 8”	3’ 9”	
2	2’	1’ 7”	3’ 9”	
3	1’ 5”	1’ 5”	1’ 10”	
4	1‘ 5”	1’ 5”	1’ 10”	Note: cabinets 3 & 4 will be stacked on top of each other
5	2’ 9”	1’ 3”	6’ 6”	
6	5’ 2”	4’ 1”	6’	Propane
7	4’ 8”	1’ 7”	3’ 9”	
8	3’ 7”	1’ 7”	5’ 6”	
9	2’	1’ 7”	3’ 9”	
10	3’ 8”	1’ 7”	5’ 9”	
11	3’ 8”	1’ 7”	5’ 9”	

Cabinet to be constructed

Cabinet	Length		Depth	Height	Comments
12	17’ 11”		3’ 8”	7’ 4”	oil drum storage rack built by MKSS staff

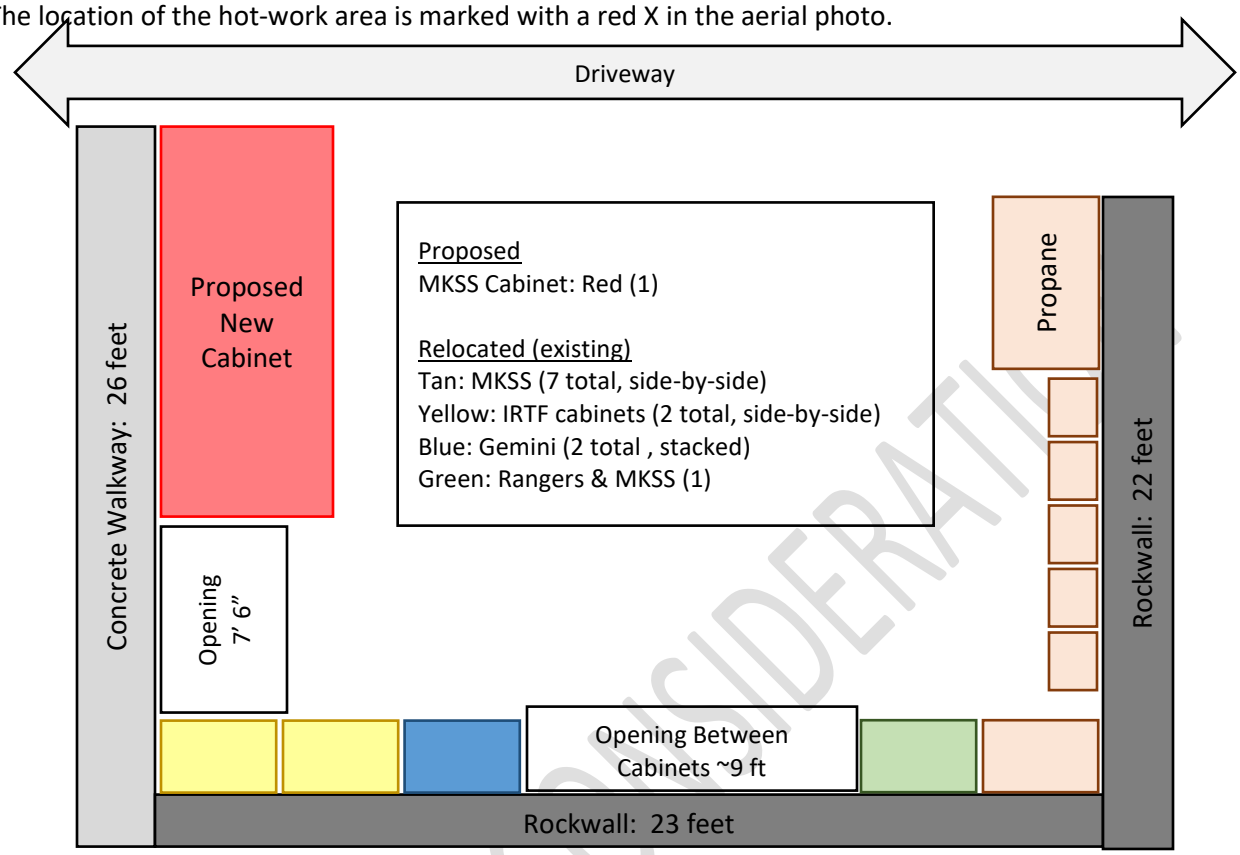
The existing storage cabinets are currently placed in various areas around the Utilities base yard and are currently used by different organizations (MKSS, OMKM, IRTF, Gemini) to store cleaning supplies, and hazardous / flammable materials. The new storage cabinet will be built by MKSS staff and used to store oil currently stored in the Utilities workshop. Containment pans would be placed below the oil storage rack.

The oil drum storage cabinet would be constructed by MKSS staff using box-tube metal framing and corrugated metal panels for the sides and roof. The doors of the cabinet will be expanded metal sheets. Dimensions are 18'1"wide x 3'10"deep x 8'1"tall.

No foundation preparation is necessary as the site is already asphalt pavement. To keep the cabinet from tipping over, it will be secured by bolting it to the ground. In addition, the weight of the cabinet and oil containers will help to keep it from tipping over.

<u>Location</u>
Storage units will be located adjacent to the general maintenance workshop in the Utilities base yard at Halepōhaku. See diagram on the top of the next page:

Site Plan: the proposed cabinet locations are shown below in both schematic and aerial photo formats. The location of the hot-work area is marked with a red X in the aerial photo.



Below are current photos of the area for the proposed location of the cabinets.

Description of the process of completing the project

MKSS staff will reposition the existing storage units to the locations previously shown.

The oil drum storage area would be constructed by MKSS staff using metal framing and corrugated metal panels for the sides and roof. Dimensions are 17'11" long x 3' 8"D x 7' 4"T

Who will do the work?

MKSS General Maintenance Staff

Equipment & Transportation

N/A

Measures to protect the environment and/or mitigate impacts

Impacts

None

Protective Measures

Notify OMKM in writing at least 5 days prior to beginning field work on UH managed lands (Halepōhaku, Road Corridor, Maunakea Science Reserve, or Astronomy Precinct).

All project participants must attend a Maunakea orientation prior to participating in field work.

Allow OMKM Rangers to visit and monitor activities.

Comply with all actions and measures described in the proposal, including (community) benefits, CMP compliance list, and mitigation measures.

Ensure that loose tools or equipment are not left unattended and are properly stored at the end of each day.

All improvements shall be designed and installed to withstand the severe weather conditions on the mountain.

Remove and properly dispose of all waste material. All perishable items including food, food wrappers and containers, etc. shall be removed from the site at the end of each day and properly disposed.

Nēnē (Branta sandvicensis) may be present. If a nēnē appears within 100 feet (30.5) meters of ongoing work, all activity shall be suspended until the animal leaves the area of its own accord. Feeding of nēnē is prohibited.

The approval may not be transferred or assigned. All persons associated with this project must carry a copy of the permit while they are working on University-managed lands.

Notify OMKM in writing when field activity associated with the project is completed.

Compliance with Lease, Sublease, or Comprehensive Management Plan (CMP)

The project proposal addresses CMP management action P-1. Compliance with all applicable federal, state, and local laws, regulations, and permit conditions related to activities in the UH Management Areas.

Identify other required or associated permits

N/A

Five Year Outlook

MKSS has an approved Five-Year Outlook for the period 2020-2024 (Oil and Flammable Gas Storage). Per OMKM guidance, the project was modified to include relocation of existing HazMat storage after the current Five-Year Outlook was submitted to OMKM.

Community Benefits

Benefits to other Maunakea entities and/or global astronomy community

The project addresses public and worker safety.

Benefits to the Hawaii Island community

The project addresses public and worker safety.

Will data, publications, or other products be free and available to the public?

N/A

DLNR Evaluation Criteria

After approval by the Maunakea Management Board, the Department of Land & Natural Resources or Board of Land & Natural Resources will evaluate the merits and approve the project based on the following eight criteria (§13-5-30). See http://dlnr.hawaii.gov/occl/files/2013/08/13-5-2013.pdf

1. The purpose of the Conservation District is to conserve, protect, and preserve the important natural and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. (ref §13-5-1) How is the proposed land use consistent with the purpose of the conservation district?

The project improves safety by providing secure exterior storage for oil drums and flammable gasses. It also consolidates HazMat storage into one central location.

2. How is the proposed use consistent with the objectives of the Resource subzone of the land on which the land use will occur? (§13-5-13 The objective of this subzone is to ensure, with proper management, the sustainable use of the natural resources of those areas. This subzone shall encompass: lands necessary for providing future parkland and lands presently used for national, state, county, or private parks. Land suitable for outdoor recreational uses such as hunting, fishing, hiking, camping, and picnicking.)

The project improves safety by providing secure exterior storage for oil drums and flammable gasses and consolidates HazMat storage into one central location. This material storage is a required component of managing lands where facility and road maintenance occurs.

3. Describe how the proposed land use complies with the provisions and guidelines contained in chapter 205A, HRS, entitled “Coastal Zone Management”.

N/A

4. Describe how the proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.

All storage units will be placed on a paved area. This has no impact on surrounding areas.

5. Describe how the proposed land use, including buildings, structures and facilities, is compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

All storage units will be placed in the general maintenance workshop area.

6. Describe how the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon.

This project limits its footprint to within existing paved, developed area. The storage structures are movable, such that they can be repositioned if management needs require such a change.

7. If applicable, describe how subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.

N/A

8. Describe how the proposed land use will not be materially detrimental to the public health, safety and welfare.

The project improves safety by providing secure exterior storage for oil drums and flammable gasses, and consolidates HazMat storage into a central location.

Count of Hawai‘i Building Code/Permit

The County Building code exempts certain types of structures from requiring a building permit, such as storage sheds. There are two types of general storage sheds mentioned in the Code with different maximum dimensions for structures that do not require a permit. The uncertainty is which category of storage sheds does the MKSS one fall under. The MKSS storage shed exceeds the height limitations of one shed category and, hence is submit to a permitl