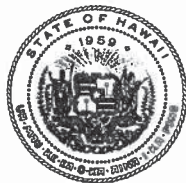


NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LINDA ROSEN, M.D., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
EMD/CWB

06007PCTM.14

June 12, 2014

Mr. Gary Sanders
Project Manager
TMT Observatory Corporation
1200 E. California Boulevard, Mail Code 102-8
Pasadena, California 91125

Dear Mr. Sanders:

In accordance with the provisions of the Clean Water Act, Hawaii Revised Statutes, Chapter 342D; and Hawaii Administrative Rules, Chapters 11-54 and 11-55, the Department of Health (DOH), Clean Water Branch (CWB) has reviewed the following application for a National Pollutant Discharge Elimination System (NPDES) permit to discharge storm water run-off associated with construction activity:

<u>Facility</u>	<u>Permit No.</u>
Thirty Meter Telescope Observatory Mauna Kea, Island of Hawaii, Hawaii	HI S000431

The public notice of our proposed action was published in the *Honolulu Star-Advertiser* on **Thursday, May 1, 2014**, regarding the above application.

After consideration of the expressed views of all interested persons and agencies, pertinent Federal and State statutes and rules regarding the discharge, the DOH hereby issues the enclosed NPDES permit for the discharge referred to above. This action does not constitute a significant change from the tentative determination set forth in the public notice.

This permit will take effect on **June 12, 2014**.

Please complete the DOH Customer Satisfaction Survey regarding your experience in applying for this permit. This brief survey is available on the e-Permitting Portal located at: <https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx>. Please use the Application Finder button and search for the "Customer Satisfaction Survey."

Mr. Gary Sanders
June 12, 2014
Page 2

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Should you have any questions, please contact the Enforcement Section or Mr. Colin Maruoka of the Engineering Section, CWB, at (808) 586-4309.

Sincerely,



STUART YAMADA, P.E., CHIEF
Environmental Management Division

CTM:tg

Enclosure: NPDES Permit

- c: Water Division (WTR-5), CWA Standards and Permits Office, EPA, Region 9
(w/encls.) [via e-mail sablad.elizabeth@epamail.epa.gov only]
- Ms. Jan Reichelderfer, PB Americas Inc.
(w/encls.) [via e-mail reichelderfer@pbworld.com only]
- Mr. Paul Gillett, TMT Observatory Corporation
(w/encls.) [via e-mail pgillett@tmt.org only]
- Mr. Jim Hayes, PB Americas Inc.
(w/encls.) [via e-mail hayesj@pbworld.com only]

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et seq.; the "Act"); Hawaii Revised Statutes, Chapter 342D; and Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55, Department of Health (DOH), State of Hawaii;

TMT OBSERVATORY CORPORATION

(hereinafter PERMITTEE),

is authorized to discharge storm water associated with construction activities from the Thirty Meter Telescope (TMT) Observatory project site located at 13-North Site in Area E of the Astronomy Precinct, Mauna Kea Science Reserve and Hale Pohaku on Mauna Kea, Mauna Kea, Island of Hawaii, Hawaii, TMKs: (3) 4-004-015:009 and (3) 4-004-015:012 to the receiving State waters identified in the table below:

Discharge Point No.	Receiving State Water	Classification	Latitude (N)	Longitude (W)
1	Kemole Gulch	Class 2, Inland	19.845833°	155.500278°
2	Kuupahaa Gulch	Class 2, Inland	19.860556°	155.497500°
3	Puupohakuloa Gulch	Class 2, Inland	19.810000°	155.509444°
4	Pohakuloa Gulch	Class 2, Inland	19.787500°	155.496944°
5	Wailuku River	Class 2, Inland	19.711944°	155.307500°

in accordance with the general requirements, discharge monitoring requirements and other conditions set forth herein, and in the attached DOH "Standard NPDES Permit Conditions," that is available on the DOH, Clean Water Branch (CWB) website at <http://health.hawaii.gov/cwb/site-map/home/standard-npdes-permit-conditions/>.

All references to Title 40 of the Code of Federal Regulations (CFR) are to regulations that are in effect on July 1, 2013, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the CFR.

This permit will become effective on **June 12, 2014**.

This permit and the authorization to discharge will expire at midnight, **June 11, 2019**.

Signed this 12th day of June, 2014.



(For) Director of Health

**FINAL PERMIT
June 12, 2014**

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**ATTACHMENT:
STANDARD NPDES PERMIT CONDITIONS (VERSION 14)**

A. GENERAL REQUIREMENTS

The Permittee shall:

1. Comply with all materials submitted in and with the application, dated March 31, 2014.
2. Retain a copy of the application, including other related materials, and this permit at the job site or at a nearby field office.
3. Design, operate, implement, and maintain the project Site-Specific Best Management Practices (BMPs) Plan to ensure that storm water discharges associated with construction activities will not cause or contribute to a violation of applicable State water quality standards.
4. Implement the project Site-Specific BMPs Plan as often as needed to improve the quality of storm water discharges or when instructed by the Director of Health (Director).
5. Not cause or contribute to a violation of the basic water quality criteria as specified in HAR, Chapter 11-54, Section 11-54-4.
6. Inspect, at a minimum of once per week, the receiving state waters, storm water runoff and control measures and BMPs to detect violations of and conditions which may cause or contribute to a violation of the basic water quality criteria as specified in HAR, Chapter 11-54, Section 11-54-4 (e.g., the Permittee shall look at storm water discharges and receiving state waters for turbidity, color, floating oil and grease, floating debris and scum, materials that will settle, substances that will produce taste in the water or detectable off-flavor in fish, and inspect for items that may be toxic or harmful to human or other life).
7. Immediately stop, reduce, or modify construction, or implement new or revised BMPs as needed to stop or prevent a violation of the basic water quality criteria as specified in HAR, Chapter 11-54, Section 11-54-4.
8. Review the effectiveness and adequacy of the implemented Site-Specific BMPs Plan(s) and Erosion and Sediment Control (ESC) Plan(s) at a minimum of once per week, and update the plan as often as necessary. Any changes(s) to the Site-Specific BMPs Plans and/or ESC Plans or correction(s) to information already on file with the CWB shall be maintained onsite and be available upon request.

PART A
PERMIT NO. HI S000431
Page 4

9. Know that Mr. Paul Gillett of TMT Observatory Corporation is recognized as the duly authorized representative to submit all information/documents for compliance with the NPDES conditions. A new authorized representative may be appointed in accordance with Part B.8.

B. REPORTING REQUIREMENTS

The Permittee shall:

1. Submit the following information in accordance with Part B.8. of this permit to the CWB for review and comment **at least 30 calendar days before the start of construction activities.**

All questions/concerns that the DOH may have must be answered to the satisfaction of the CWB.

- a. The County-approved ESC Plan and/or Grading Permit.
 - b. Operator or General Contractor information
2. BMPs used for land disturbance activities shall be located upland and treat all upland pollutants prior to any discharge. These BMPs shall be designed and implemented to ensure all upland pollutants are prevented from discharging to State waters. BMPs for in-water work shall be designed and implemented to ensure compliance with all applicable WQS.
 3. Notify the Director of the construction start date in accordance with Part B.8. within seven (7) calendar days before the start of construction activities.
 4. Complete and submit the Solid Waste Disclosure Form for Construction Sites to the DOH, Solid and Hazardous Waste Branch, Solid Waste Section as specified on the form at least 30 calendar days before the start of construction activities. The form can be downloaded at:
<http://health.hawaii.gov/shwb/files/2013/06/swdiscformnov2008.pdf>.
 5. Submit any changes to information on the CWB Individual NPDES Form in accordance with Part B.8. as soon as changes arise. The Permittee shall properly address all related concerns and/or comments to the CWB's satisfaction.
 6. Immediately notify the Director of all incidences of noncompliance and identify the pollutant(s) source(s) and the proposed and implemented control or mitigative measures as required in Section 16 of the "Standard NPDES Permit Conditions".
 7. Complete and submit the Notice of Cessation in accordance with Part B.8. within 14 calendar days of completion of the subject project.

8. All reports, notifications, and updates to information on file shall be submitted through the CWB Compliance Submittal Form for Individual NPDES Permits and Notice of General Permit Coverages (NGPCs). This form is accessible through the e-Permitting Portal website at: <https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx>. If not already registered, you will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool to locate the form. Follow the instructions to complete and submit this form. All submissions shall include a CD or DVD containing the downloaded e-Permitting submission and a completed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form, with original signature and date.
9. Include the following certification statement, NPDES permit number, and original signature on each submittal in accordance with HAR, Chapter 11-55, Section 11-55-07(b). Failure to provide this information on future correspondence or submittals may be a basis for delay of the processing of the document(s).

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

10. The Permittee shall develop and submit a facility-specific waste load allocation (WLA) implementation and monitoring plan to the Director when a Total Maximum Daily Load, which specifies WLAs applicable to the Permittee's discharge, is approved by the EPA within one (1) year of notification of the approval date.

C. BEST MANAGEMENT PRACTICES (BMPs)

1. The Permittee shall:
 - a. Refrain from performing any work during heavy rainstorms.
 - b. Prevent loose particles, sand, soil, silt, and other construction debris at the project site from being washed away by storm water runoff to drainage systems and to State waters.
 - c. Remove the excavated material as soon as possible or at the end of each work day. The excavated material shall be disposed in a State and/or County-approved landfill site.
 - d. Not discharge water used for dust control to State waters.
 - e. Not discharge water used for irrigation to State waters.
 - f. Not discharge hydrotesting effluent to State waters without an appropriate NPDES permit.
 - g. Not discharge dewatering effluent to State waters without an appropriate NPDES permit.
 - h. Not stockpile unprotected materials on-site without implementing the appropriate BMPs for the stockpile(s).
 - i. Wash-down vehicles and/or equipment and concrete truck drums only at designated areas and not discharge the wash waters to State waters. The concrete wash water shall not be allowed to infiltrate into the ground.
 - j. Assure that the implemented BMPs are effective and the discharge effluent is in compliance with the basic State water quality standards.
2. The following special conditions apply to all land disturbance work conducted under this permit:
 - a. Construction Management Techniques
 - (1) Clearing and grubbing shall be held to the minimum necessary for grading and equipment operation.

- (2) Construction shall be sequenced to minimize the exposure time of the cleared surface area.
- (3) Construction shall be staged or phased for large projects. Areas of one (1) phase shall be stabilized before another phase is initiated. Stabilization shall be accomplished by temporarily or permanently protecting the disturbed soil surface from rainfall impacts and runoff.
- (4) Erosion and Sediment Control Measures shall be in place and functional before earth moving operations begin. These measures shall be properly constructed and maintained throughout the construction period.
- (5) All control measures shall be checked and repaired as necessary, for example, weekly in dry periods and within 24 hours after any rainfall of 0.5 inches or greater within a 24-hour period. During prolonged rainfall, daily checking is necessary. The Permittee shall maintain records of checks and repairs.
- (6) The Permittee shall maintain records of the duration and estimated volume of storm water discharge(s).
- (7) A specific individual shall be designated to be responsible for erosion and sediment controls on each project site.

b. Vegetation Controls

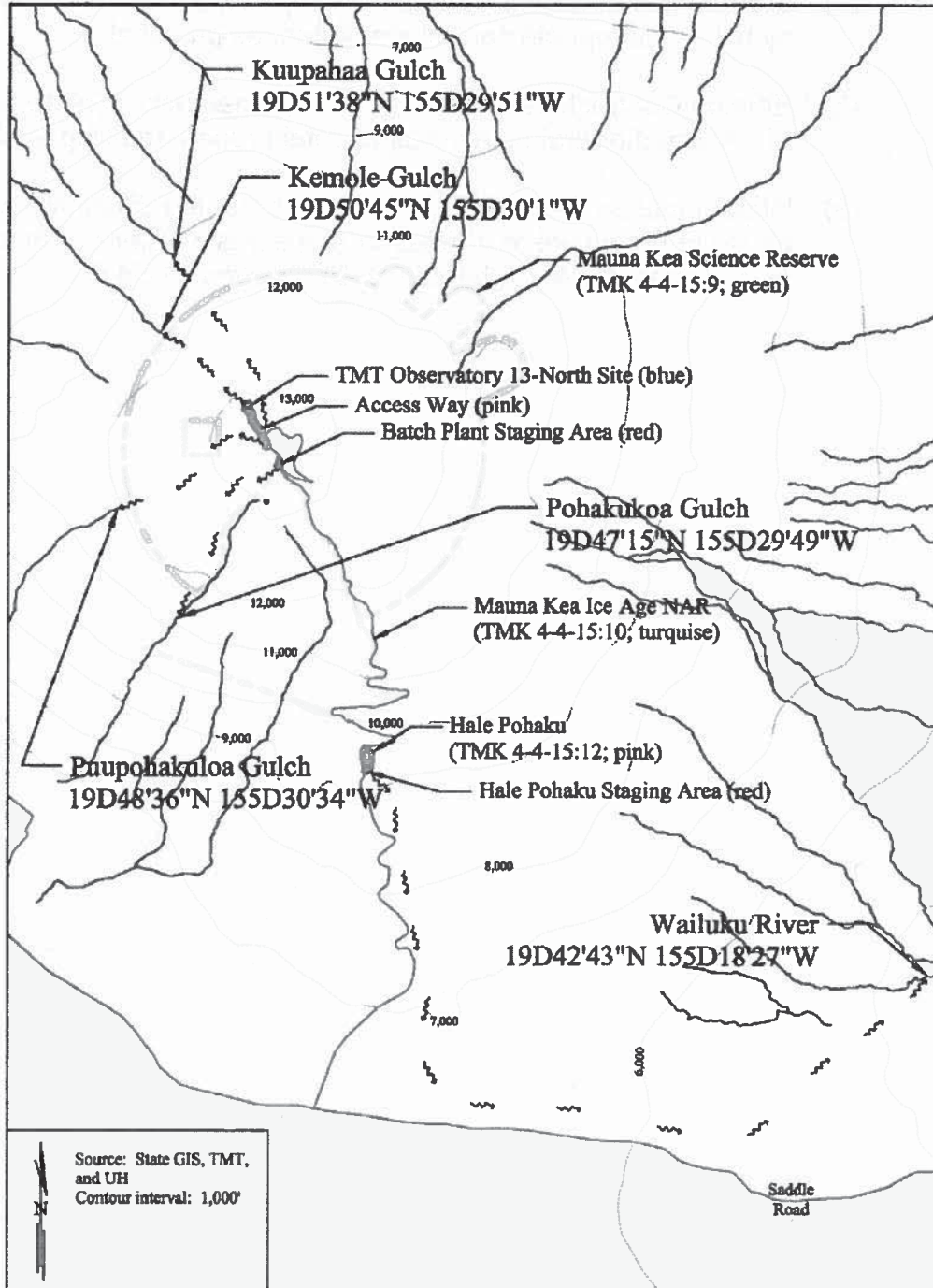
- (1) Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than 20 calendar days prior to land disturbance.
- (2) Temporary soil stabilization with appropriate vegetation shall be applied on areas that will remain unfinished for more than 30 calendar days.
- (3) Permanent soil stabilization with perennial vegetation or pavement shall be applied as soon as practical after final grading. Irrigation and maintenance of the perennial vegetation shall be provided for 30 calendar days or until the vegetation takes root, whichever is shorter.

c. **Structural Controls**

- (1) Storm water flowing toward the construction area shall be diverted by using appropriate control measures, as practical.
- (2) Erosion Control Measures shall be designed according to the size of disturbed or drainage areas to detain runoff and trap sediment.
- (3) Water must be discharged in a manner that the discharge shall not cause or contribute to a violation of the basic water quality criteria as specified in HAR, Chapter 11-54, Section 11-54-4.

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D. MAPS



Location & Outfall Map