



In reply, please refer to:
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STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

January 9, 2020

The applicant, TMT International Observatory (Applicant) published a Notice of Proposed Water Pollution Control Permit to renew a National Pollutant Discharge Elimination System (NPDES) permit for the Thirty Meter Telescope (TMT) Observatory project on March 7, 2019. Public comments were received, and on May 23, 2019, the Department of Health (DOH) published a notice of public hearing. At the public hearing and through the extension of time for receiving written submissions, DOH received 464 written submissions. The purpose of this letter is to outline the criteria DOH considers in reviewing the application and, where the public has commented (both orally and in writing), generally describe the evidence on the subject currently before DOH.

STORM WATER DISCHARGE PERMIT

In general, an NPDES permit ensures that the State's mandatory standards for water pollution and the federal minimum requirements are being met. In broad terms, an NPDES permit contains:

- limits on what an applicant may discharge;
- monitoring and reporting requirements; and
- other provisions to ensure that the discharge does not hurt water quality or people's health.

The Renewal Permit (as defined below) application being evaluated here is based on an NPDES permit authorizing discharges of storm water associated with construction activities to identified State waters from the Thirty Meter Telescope (TMT) Observatory project site (Project Site). Among other things, the Original Permit (as defined below) did, and the Renewal Permit would, include obligations on the part of the permittee designed to ensure that the State's Water Quality Standards are being met. Construction at the Project Site and its potential impact on State waters must also meet the State's antidegradation policy which requires that existing uses and the level

of water quality necessary to protect existing uses of the receiving State water be maintained and protected.¹

Based on the general and special conditions we proposed to impose on Applicant, and as set forth in greater detail in our Permit Rationale letter dated March 7, 2019, DOH believes the discharge will not cause unreasonable degradation to the marine environment or unreasonable degradation to the receiving water environment when Applicant complies with the conditions of the permit. DOH also believes the Renewal Permit would meet Hawaii's antidegradation policy because it requires the permittee to apply the best degree of treatment or control to the discharge, with the result that any residual soil reaching the receiving State waters will be of an acceptable level under HAR § 11-54-4(c).

PROCEDURAL HISTORY

Original Permit. On March 31, 2014, TMT Observatory Corporation submitted its application for a permit authorizing discharges of storm water associated with construction activities from the Project Site to identified State waters. On May 1, 2014, a notice was published indicating that comments on the permit application or a request for public hearing would be received until May 30, 2014. DOH did not receive any comments and there were no requests for a public hearing.

On June 12, 2014, a Final Permit (NPDES Permit No. HI S000431) was issued (Original Permit) and became effective on that date. The Original Permit authorized the permittee to "discharge storm water associated with construction activities from the . . . project site" to certain receiving State waters, in accordance with certain general requirements, discharge monitoring requirements, and other conditions.

Since June 12, 2014 through the date of this letter, there has been no construction activity on the Project Site, and, therefore, no storm water discharge associated with construction activities. Since there has been no construction activity and no storm water discharged, DOH has not found any violation of the conditions of the Original Permit.

Renewal Permit. On December 3, 2018, the Clean Water Branch of DOH received the Certification Statement dated November 16, 2018 to renew the Original Permit. A Notice of Proposed Water Pollution Control Permit to renew the Original Permit for the TMT International Observatory project (Renewal Permit) was published

¹ HAR § 11-54-1.1.

On March 7, 2019, in the *Hawaii Tribune Herald*. The March 7, 2019 notice indicated that comments on the Renewal Permit or a request for public hearing would be received until April 6, 2019. In contrast to the process associated with the Original Permit, DOH received 125 submissions, including multiple submissions from certain individuals.

In response to comments submitted, on May 23, 2019, DOH published a notice of public hearing for the Renewal Permit in the *Hawaii Tribune Herald* and *West Hawaii Today*. This notice indicated that the public hearing would be held on June 25, 2019 at the West Hawaii Civic Center, Council Chambers, starting at 5:00 p.m. This notice further indicated that DOH would continue to receive comments on the Renewal Permit until 4:30 p.m. on June 25, 2019. DOH was unable to receive email comments on June 25, 2019, so the comment period was extended to July 9, 2019. DOH received 444 written submissions.

CRITERIA FOR REVIEW

Limited Focus on Storm Water. The focus of the Original Permit was to put limits and conditions on any storm water the permittee would be allowed to discharge into State waters from the Project Site during construction. The scope of the Renewal Permit remains limited to storm water discharge limitations and conditions from the Project Site.

We note that certain public comments raise concerns about threats to drinking water, threats to aquifers, mercury spillage, spills of chemical wastewater or raw sewage during operation of the observatory, and the impact on endangered species from the loss of access to clean water or water pollution. The Renewal Permit is only applicable to storm water discharges. The Renewal Permit does not authorize wastewater discharges to State waters.

We note that certain public comments raise concerns about impacts on historic sites and traditional cultural properties and/or practices. To the extent storm water discharge could have such impacts, these would be considered in formulating limitations and/or conditions to the Renewal Permit, if granted.

Evaluating the Renewal Permit. An application to renew an existing permit is submitted 180 days or more before the expiration of the permit. The application for the

Renewal Permit was timely and properly submitted prior to the expiration date of the Original Permit. The DOH may deny² a permit renewal application where:

- the permittee has not substantially complied with any condition of the Original Permit;
- the permittee misrepresented any or did not fully disclose all relevant facts in the application or during the permit issuance process;
- the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by modifying or terminating the Original Permit; or
- there is a change in any condition that requires either a temporary or permanent reduction or elimination of any discharge controlled by the Original Permit.

As we noted above, there has been no construction activity on the Project Site and the project has not commenced. Therefore, as a practical matter, there has been no opportunity for the permittee to fail to substantially comply with any condition of the Original Permit.

DOH is not aware of the permittee failing to fully disclose, certify, or provide other required information for reissuance of the Renewal Permit.

As noted above, the Original Permit does, and the Renewal Permit would, include obligations on the part of the permittee designed to ensure that the State's Water Quality Standards are being met. Further, the Renewal Permit would contain conditions to ensure storm water discharges will not cause unreasonable degradation to the receiving water environment when the permittee complies with the conditions of the permit. Since State Water Quality Standards would be met and unreasonable degradation would be avoided, DOH does not believe the permitted activity endangers human health or the environment such that it can only be regulated to acceptable levels by modifying or terminating the Original Permit.

As noted in our evaluation of the relevant criteria, above, there has been no construction activity and no material change in the scope of the project or Project Site. Therefore, DOH believes there is no change in any condition that requires a reduction or elimination of any discharge controlled by the Original Permit.

² HAR § 11-55-17(c).

RESPONSE TO PUBLIC COMMENTS

Set forth, below, is a summary of public comments received. Where the same, substantially similar, or closely-related issues appear across multiple comments, DOH attempts to group those into categories and summarize them. DOH's response to each category of comments appears below. An itemized table of each of the 444 written comment documents received follows this summary.

Comment 1 (purpose of permit)

Commenters:

- wanted DOH to protect our water;
- had concerns about the water being poisoned by waste;
- had concerns about additional sediment and pollution; and
- had concerns about the need for additional BMP Controls requirements.

Response to Comment 1: The purpose of the proposed NPDES permit is to authorize storm water discharges associated with construction activities. The proposed permit is meant to protect State waters.

The proposed NPDES permit requires the discharger to comply with Hawaii Administrative Rules (HAR) Chapter 11-55, Appendix C, which is the Construction Storm Water General Permit (CGP). The CGP contains the federal Construction and Development Effluent Guidelines in 40 CFR Part 450 and other Best Management Practices (BMPs) to control potential pollutants in the storm water discharge.

Construction site developers are required to:

- implement erosion and sediment controls;
- stabilize soils;
- manage dewatering activities;
- implement pollution prevention measures;
- provide and maintain buffers around surface waters;
- prohibit certain discharges, such as motor fuel and concrete washout; and
- utilize surface outlets for discharges from basins and impoundments.

Comment 2 (scope of permit)

A commenter opposed the new construction on Mauna Kea and The University of Hawaii's management of Mauna Kea. A commenter had concerns that the telescopes leak mercury from the lens and can impact groundwater. A commenter expressed concerns about the underground wastewater tanks that will be utilized during the operation of the facility. A commenter was concerned about the disposal of wastewater runoff, as a result of observing the leakage of hydraulic fluid, oil and other substances in 2015. A commenter had concerns with the lack of engineering criteria shown in the application (i.e. signed engineering drawings, engineering soils report, or grading strategy adhering to County of Hawaii Code).

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Response to Comment 2: The NPDES program regulates point pollutant discharges. This construction activity is considered a point source, which may be regulated under the NPDES program.

- The proposed NPDES permit only authorizes storm water discharges during construction.
- The proposed NPDES permit does not authorize construction activity itself.
- The proposed NPDES permit does not authorize wastewater discharges to State waters.
- The proposed NPDES permit does not cover activities conducted during operation of the facility.
- Any concerns regarding potential discharges during operation of the facility are outside of the scope of the proposed NPDES permit.
- Any county code requirements, including signed engineering drawings, soils report, and county grading permits, are outside the scope of review of the proposed NPDES permit.

DOH notes that, according to Applicant, the Environmental Impact Statement (EIS) and Conservation District Use Application (CDUA) disclosed that the TMT project will not utilize mercury in any capacity during construction or operation, and therefore, a mercury leak affecting the environment is not possible.

DOH notes that, according to Applicant, the TMT project has a zero-discharge policy so that during operation of the facility there will be no wastewater discharges.

Comment 3 (drinking water and aquifer)

A commenter stated that other hearings clarified that run off during construction will not impact drinking water. Commenters have stated that there are no wells tapping into groundwater near the summit of Mauna Kea with the closest well for drinking water being 12 miles away from the Project Site. A commenter stated that hydrologists have determined there is no reasonable prospect of adverse impact to groundwater.

Response to Comment 3: DOH notes that, according to Applicant, the TMT project has a zero-discharge policy so that during operation of the facility there will be no wastewater discharges.

As outlined in Response to Comment 1, the proposed NPDES permit is meant to protect State waters. During construction, the BMPs and mitigation measures to be employed by the TMT project will protect water quality.

Comment 4 (precipitation)

A commenter wanted to learn more about whether the possible runoff from the construction activity could increase erosion and cause potential water pollution. Another commenter expressed concerns with storm water associated with construction activities infiltrating the ground and discharging to groundwater.

Another commenter stated that the top of Mauna Kea is drier than many other high mountains because a tropical inversion layer ensures summit skies are dry. A commenter stated that protected waterways of concern do not originate close to the arid summit.

Response to Comment 4: As outlined in the Final EIS for the project, given the surface topography, permeability of the surface and subsurface, and the low rainfall rates and annual totals in the summit region, storm water runoff is anticipated to quickly infiltrate the subsurface and not increase erosion.

As outlined in Response to Comment 1, the proposed NPDES permit is meant to protect State waters. During construction, the BMPs and mitigation measures to be employed by the TMT project will protect water quality.

Comment 5 (hydrology)

A commenter requested documentation of the hydrology of the summit, and the precise impacts of oil and hydraulic fluids on the perched water bodies that may be impacted. Another commenter stated that a full hydrological study of the proposed TMT site was not done. A commenter stated that significant water related research was completed after the close of the Mauna Kea Contested Case Hearings and must be considered.

Response to Comment 5: Applicant indicated that the commenter requesting documentation submitted similar comments regarding hydrology during the EIS review period.

- The Final EIS responded to those comments and provided sufficient information to conclude that the TMT project will have a less than significant impact on water resources, including groundwater quality and the perched groundwater associated with Lake Waiau in the summit region.
- Mitigation measures, such as the zero-discharge wastewater system, will further reduce the level of potential impact to water resources, which was considered to be less than significant without any mitigation.

As outlined in Response to Comment 1, the proposed NPDES permit is meant to protect State waters. The BMPs and mitigation measures to be employed by the TMT project will protect water quality, including potential impacts associated with the use of oil and hydraulic fluids during construction.

Comment 6 (cultural impact)

Commenters were concerned about the historic sites and traditional cultural properties that will be in jeopardy due to construction runoff. Commenters were concerned about the cultural significance of Mauna Kea.

Another commenter stated that discharge of storm water will not impact traditional cultural sites on Mauna Kea in any way.

Response to Comment 6: According to the Renewal Permit application, historic sites will not be adversely affected by runoff from the project construction site.

Although beyond the scope of the proposed NPDES storm water discharge permit, Applicant indicated that any cultural impacts will be mitigated by training TMT employees to respect, honor, and not restrict or interfere with cultural or religious practices. Cultural training will also be provided to construction managers, contractors, supervisors, all construction workers, and all persons involved in operation and maintenance activities including, but not limited to, scientist and support staff.

The University of Hawaii's (UH) Office of Mauna Kea Management, is currently in the process of developing a Cultural Resource Management Plan, which is a requirement of the Board of Land and Natural Resources (BLNR) prior to the submission of a CDUA for the TMT project.

Comment 7 (endangered species)

A commenter was concerned that the construction activities will destroy or adversely impact the Palila or any endangered plant species, such as the Silversword. The commenter wanted to know if the US Fish and Wildlife Service (USFWS) has been consulted.

Response to Comment 7: Applicant indicated that there are no threatened or endangered species or designated critical habitat in the vicinity of the TMT project construction sites in the summit region of Mauna Kea (above roughly 13,000 feet). Palila and their designated critical habitat occur much lower (below roughly 9,000 feet) on Mauna Kea.

The USFWS was consulted. Applicant further indicated that the Draft and Final EIS for the TMT project was sent to the USFWS. The USFWS did not provide comments on either EIS.

Comment 8 (public hearing)

Commenters requested a public hearing:

- for the opportunity to present facts, opinions or arguments about the proposed permit;
- for the opportunity to learn more about the proposed permit before the permit is denied or approved;
- because they have significant interest in the proper issuance of the permit and rights that may be affected by that issuance; and
- due to the project's potential to adversely impact Mauna Kea aquifers.

A commenter stated that permit documents for public review were out-of-date, despite a statement on the Water Pollution Control website that all NPDES documents can be viewed and downloaded, and further noting that nothing related to the 2019 filings for

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permit HIS000431 was available. In addition, the commenter noted that Clean Water Branch (CWB) stated that the servers were full and so CWB was unable to upload new documents.

Another commenter was concerned that the public meeting would not focus on the merits of permit renewal, but would, instead, be used as another opportunity for anti-TMT protestors.

Response to Comment 8: The Renewal Permit was published in the *Hawaii Tribune Herald* on March 7, 2019 for public review and comment. At the Director's discretion, DOH published a notice of public hearing on May 23, 2019. The purpose of the public notice was to solicit comments from the public on the proposed permit. The Director held a public hearing for this NPDES permit application on June 25, 2019, at the West Hawaii Civic Center. The public comment period was extended through July 9, 2019 and all Renewal Permit documents were made available on the CWB website and at the CWB Honolulu Office and the DOH District Health Offices.

Comment 9 (contested case hearing)

A commenter was concerned about a contested case hearing request being made at the public hearing prior to the issuance of the NPDES permit renewal, and asked if there is a rough schedule to when the NPDES permit will be renewed.

Response to Comment 9: A contested case hearing is governed by HRS Chapter 91 and HAR Chapters 11-1 and 11-55.

Comment 10 (administrative extension of permit)

A commenter stated the NPDES permit is going to public hearing on June 25, 2019, and was not renewed prior to the June 19 issuance of the Notice to Proceed. The commenter stated that the Original Permit expired by its own terms on June 11, 2019, and that an administrative extension does not satisfy item GC3, which requires that TMT has "obtained a NPDES."

Response to Comment 10: Applicant submitted a complete NPDES Individual Permit application December 3, 2018 for storm water associated with construction activities. Pursuant to HAR §11-55-15(a), "[t]he director may administratively extend the permit until the effective date of the new permit for discharges that the permit covered prior to expiration." All permit limitations and conditions remain in force and effect.

Comment 11 (Notice to Proceed)

A commenter stated that the public participation in the NPDES permitting was denied because the Notice to Proceed was already, violating opponents' right to due process in the NPDES permitting process.

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Response to Comment 11: The Notice to Proceed, dated June 19, 2019, appears to have been issued in connection with an approved Conservation District Use Permit (CDUP). The CDUP was approved by BLNR. The CDUP is not an NPDES permit and the Notice to Proceed does not preclude DOH from evaluating the Renewal Permit application.

Comment 12 (notice of start)

A commenter stated that it remains unclear whether TMT must file a new notice of start.

Response to Comment 12: A notification of start of construction is required from permittee shortly in advance of the date permittee anticipates starting construction. DOH requires the notification so that it can determine when to start inspecting the Project Site for compliance with permit conditions. The permittee is required to submit a notification of start of construction only at the initial start. DOH received a notification of start of construction September 12, 2014.

Comment 13 (permit violations)

Commenters stated there are ongoing violations with the current NPDES permit.

Response to Comment 13: There have been no reportable spills or violations issued in association with the TMT project or the current NPDES permit.

Comment 14 (water classification)

A commenter noted that 4 of the 5 waters (Kemole Gulch, Kuupahaa Gulch, Puupohakuloa Gulch, Pohakuloa Gulch) are not listed in the 2013 or 2018 Water Quality Monitoring Assessment Report, stating that it is unclear how the Class 2 designation was assigned to these waters. Additional comment questions how contamination by storm water runoff from the project can be reasonably proven without a complete assessment prior to the beginning of the project? The commenter stated this allows TMT to claim a stream was degraded prior to the start of their project, and leaves the public with no information to counter that claim, rendering any attempt at enforcement of the permit impotent.

Response to Comment 14: HAR Chapter 11-54, Appendix A, identifies Class 1, Inland Waters within the State of Hawaii. All other inland waters not in the Mauna Kea Ice Age Natural Area Reserve (as identified by DLNR) are class 2 inland waters.

Water classification is a usage designation, not an indication of water quality or condition of the water body. The overall status of water quality statewide is described in the Water Quality Monitoring and Assessment Report (Integrated Report, IR). This report is used to rank and prioritize impaired waters for Total Maximum Daily Loads (TMDLs) development.

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Comment 15 (self-reporting)

A commenter noted that relying on an applicant to notify the agency of non-compliance is a weak and unrealistic expectation for meaningful enforcement of the permit.

- rules proposed by UH's office of Mauna Kea Management attempt to restrict access to Mauna Kea;
- remote nature of the TMT site make it unlikely that other agencies or the public will come across potential violations;
- citizen enforcement is an important enforcement tool that is impeded by using state police power and private security at Mauna Kea, and specifically on the TMT site.

Response to Comment 15: All NPDES permits stipulate self-monitoring and reporting requirements that are the responsibility of the discharger. Failure to comply with HAR Chapters 11-54 and 11-55 and the NPDES permit is an enforceable violation and the NPDES permit may be terminated.

The ideal situation to verify compliance with an NPDES permit would be DOH and/or an independent laboratory collecting and analyzing samples from the permittee's discharge. However, since this process is not logistically or financially possible, the burden falls on the permittee. Under the NPDES program, DOH may conduct inspections of a permittee's facility to verify that permit requirements are being met. Inspections may be limited and routine, unless suspected violations of permit requirements are uncovered, at which point a more comprehensive investigation may follow.