

Mike Plaziak, Executive Officer

June 10, 2022

CA Regional Water Quality Control Board, Lahontan Region

2501 Lake Tahoe Blvd.

S. Lake Tahoe CA 96150

(by email to mike.plaziak@waterboards.ca.gov,

cc: mary.fiore-wagner@waterboards.ca.gov)

Response to Your E-mail of May 25, 2022, Concerning Proposed and Existing Plastic Waste Discharges from Monopine Wireless Facilities, Lake Tahoe Hydrologic Unit

Dear Executive Officer Plaziak (Mike),

Thank you for your reply and the information update. I want you to know how much I appreciate the actions you are taking to engage staff with the wireless monopines plastics issues we've raised. Plastic wastes in water are clearly a Statewide priority, with regulatory controls in the implementation phase, and I know preservation of water quality and clarity at Lake Tahoe is among the top priorities in the Lahontan region. So I thank you for responding to the information we've provided.

I know the issues with litter and microplastics (MPs) are perhaps not as daunting in the Lahontan region as some others, but none of them have Lake Tahoe either, national treasure and jewel, and ultra-pure water supply for millions. Now that MPs have been detected world over, in human lungs, snow at Lake Tahoe and Lake Tahoe itself, we know there are airborne sources beyond the Water Board's control. We are like the fishes and the whales, living in an air-ocean of MP particles. It therefore becomes imperative to control the terrestrial sources that can be controlled, and it is fortunate you have strong tools in the law to begin to do that.

Key Points

There are several things in your email I wish to respond to on behalf of my associates:

- Our specific concern is with plastics and MP wastes that have been discharged or are proposed to be discharged to land, surface waters and ground waters on and off existing and proposed project sites for wireless monopine towers, and to a lesser extent, the fate of plastic

residuals at monopine tower sites in the event of fire/wildfire. We think the sites should be under enforceable regulatory requirements from the Water Board; that is our request, summarized.

- The regulatory approach you are proposing to address our concerns does not follow applicable law and policy in our view, as we will explain. We reiterate our requests to issue CWC section 13260 orders and/or other investigatory and enforcement orders to owners and operators of existing and proposed monopine towers in the Lake Tahoe Hydrologic Unit. We urge you to follow the law in all respects.
- Up to \$250,000 is available near-term through National Science Foundation grant funding to study MPs at Lake Tahoe. Through my associates, under the direction of research Professor Joachim Goes, the Columbia Climate Institute Lamont-Doherty Earth Observatory is prepared to apply for and administer grant funding for them to conduct the studies.

Outline for This Letter:

Statewide Storm Water Programs Roundtable June Meeting

Research Opportunity, Columbia University

Requests for Regulatory Action

Waiver Requirements

Waivers and “Underground Regulations”

Impermissible Regulatory Programs

Best Available Technology (BAT)

Twice-Annual Cleanups

Co-investigations with TRPA of Existing Monopine Towers

Request to Follow State Water Board Policy for Investigations and Cleanups

Suggested Path Forward

Statewide Storm Water Programs Roundtable June Meeting

I agree that, even with the limited information available, it will be helpful to put the issue of unregulated industrial plastic litter discharges from monopine (and other, palm trees, etc.) wireless facilities before the Statewide Storm Water Programs Roundtable, where I participated for many years. I see it as a way to begin to investigate what's out on the landscapes and waterscapes now, and prevent potential impacts where they are identified, not so different from what we are requesting here in the Tahoe region. From what I recall, there used to be portions of the Roundtable's agendas that were open to the public. If that is still the case, I and certain of my associates may be interested to participate, so I will be interested to coordinate with your Storm Water Programs Manager and look into that. Plastic and MP wastes may be of most interest to Municipal NPDES Permit Managers implementing the 2015 trash prohibition, as I think many such towers may be in the public right-of-ways in proximity to storm drains, but may also interest state park and beach managers, and others. Reaching the right audience, even within the Programs, can be a challenge.

Research Opportunity, Columbia University

I appreciate your interest in obtaining additional information to help understand the MP issues at Lake Tahoe from research to aid long-term management. I have a really extraordinary and unprecedented opportunity for Lake Tahoe to update you with from Professor Goes. Through his Columbia research department, he is prepared to conduct MPs soil and water sampling analyses (this summer as I understand it) using world-class, state-of-the-art labs and methods. He is willing to prepare proposals for National Science Foundation grant funding for a \$50,000 short term study and, if that study proves interesting, a \$200,000 follow-on study. His level of knowledge and understanding of MPs would certainly be of great benefit to other researchers and land-use managers in the region, the level and magnitude of proposed study beyond anything I'm aware of. From what I understand, knowledge of the potential sample sites is needed, and persons to collect samples with the protocols and equipment that will be provided. I will do what I can to facilitate getting that underway without delay. Having topographic maps of existing monopine tower locations, storm drains and waterways, and other landscape features, as you wrote you are obtaining, may be most helpful in this regard.

As you know, current information on plastics chemistry in alpine lakes being largely unavailable, my hypotheses are that microplastics scatter light, and may remain in suspension for long periods (just as oil floats on water). Further, residence time is the enemy at Lake Tahoe, where plastic pollutants will accumulate due to a residence time on the order of 600 years. Much like the

world oceans, any plastic going in may not go “away” but further degrade quality and clarity, and with toxics, no less. Dr. Arienzo, PhD, at Desert Research Institute has done some research into MPs at Lake Tahoe and recently informed one of our attorneys, Mr. Berg, Esq., that she and Laura Patten, Senior Science Policy Analyst of the League to Save Lake Tahoe, have formed a working group for MPs and that she wants to connect to discuss the monopine MPs issue we have uncovered. (See correspondence in Attachment 1, Berg Letter of March 25, 2022, and Attachment 2, Berg email correspondence.) I will be inquiring into coordinating sampling study work with that group.

Requests for Regulatory Action

In light of these positive developments, I reach out to you through our common water quality bond to urge you to reconsider certain aspects of your proposed course of action with regard to not issuing CWC section 13260 Orders and/or other investigatory and/or enforcement Orders for land owners and/or operators of monopine wireless towers in the Lake Tahoe Hydrologic Unit where prohibited discharges of industrial plastics have occurred or are planned. As you know, based on experience with the several other monopines we investigated and made you aware of, we contend these discharges are inadequately addressed by the TRPA permit(s).

Waiver Requirements

As I discussed in previous writings of April 5, 2022, the CWC specifies the following concerning waiving requirements for filing waste discharge reports or waiving waste discharge requirements:

§ 13269. [Waiver]

- (1) On and after January 1, 2000, the provisions of subdivisions (a) and (c) of Section 13260, subdivision (a) of Section 13263, or subdivision (a) of Section 13264 may be waived by the state board or a regional board as to a specific discharge or type of discharge if the state board or a regional board determines, after any necessary state board or regional board meeting, that the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest. The state board or a regional board shall give notice of any necessary meeting by publication pursuant to Section 11125 of the Government Code.

To be consistent, the Basin Plan, Chapter 4.8 sets forth criteria for Land Development, stating in relevant part (p. 4.8-1): “The Regional Board regulates the construction of subdivisions, commercial developments, **industrial developments**, and roadways based upon the level of threat to water quality.

The Regional Board will request a Report of Waste Discharge and consider the issuance of an appropriate permit for any proposed project where water quality concerns are identified in the California Environmental Quality Act (CEQA) review process. (emphasis added)

In the case of the proposed tower on Ski Run Blvd., the Water Board can't regulate it or waive requirements if it doesn't request a report of waste discharge under section 13260 or other issue other orders. In this case, water quality concerns were identified to the TRPA in the course of their permit review process which parallels CEQA under federal requirements only TRPA must satisfy, and which we contend they have not satisfied. By not requesting a report of waste discharge for this identified "Project" within your jurisdiction, where potentially significant water quality impacts were already identified (both before the TRPA and at the May 11, 2022 Water Board meeting where I and certain of my associates appeared), you are deviating from the tenets of the Basin Plan, which simply follows from section 13260 itself. By not issuing any orders, you are avoiding making findings of fact with regard to consistency with the Basin Plan, making independent CEQA findings pursuant to any necessary permit or waiver, and making findings that such waiver is truly in the public interest.

Again citing section 13260: (a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:

- (1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system."

The law is very clear here, fundamental. Any person discharging or proposing to discharge waste that could affect the quality of the waters shall file with the Water Board and let the public process unfold. In this case, Verizon is proposing to discharge industrial MPs waste on and from the Nel property, as evidenced by the approved TRPA permit for the Project and its requirement to perform twice annual cleanups, as TRPA wrote, for waste discharges which can't be prevented from the industrial point source of plastic, the monopine tower (as designed and approved). Since CWC section 13260 doesn't say "unless the wastes are regulated by TRPA," and you have been informed of the proposed waste discharge, your response email is in effect issuing a staff waiver of waste discharge requirements, and therefore not following the section 13269 requirement for a public meeting, which we opine is necessary.

Resolution R6T-2016-0035, waiving Water Board requirements for specified projects, expired over a year ago, in May 2021, as my April 5, 2022 letter

discussed. Your proposed course of action is, in most regards, employing a regulatory program that is no longer in effect. You can't use that defunct program to defer to TRPA on the proposed monopine project(s), but you can treat these Projects just like many other Projects that are co-regulated under independent permits from both TRPA and the Water Board. For example, the expired Resolution provides a variety of specific examples and states, in part:

“BE IT FURTHER RESOLVED, this action waiving the filing of a report of waste discharge and waste discharge requirements is conditional and the Executive Officer can recommend the Water Board adopt waste discharge requirements for any of the specific types of projects or discharges [previously cited], or any individual project or discharge.

By this, the Water Board has clearly retained its full authority, as it must. I suggest the proposed monopine tower project on Ski Run Blvd. is just another such project type that must be regulated by both TRPA and the Water Board, with no discretion not to at least request the discharge reports(s). The Water Board only regulates water quality while TRPA mostly regulates everything else. No explanation is offered for your proposal, no basis in law, no findings to refute the substantial facts alleging harm to the public interest provided in the record of this matter.

Among your enforcement tools is section 13260, which applies to existing dischargers and proposed dischargers of wastes, including monopine tower plastic litter and MPs wastes, with all such discharges prohibited by the Basin Plan. We suggest, at a minimum, it is entirely appropriate to issue section 13260 orders to ALL existing owners and operators of monopine wireless towers where there is evidence of a discharge. In particular, we provided evidence of discharges at three specific sites (the “Angel’s Roost” tower at Heavenly Ski Area, the Hekpa Drive tower site where you stated you saw evidence of discharge, and the tower near the Meyers Fire station). We specifically request issuing section 13260 orders or other orders without further delay to these dischargers, as well as for the Ski Run Blvd Project.

Waivers and “Underground Regulations”

Section 13269 (1) begins, “On and after January 1, 2000 . . .” because 2000 was when certain Legislated amendments to the Water Code section came in to effect, to prevent widespread abuses of the regulatory process that preceded the amendment, such as declining to issue orders and issuing staff waivers. In declining to issue orders, you restated my concerns, in part, writing:

“ . . . microplastics from the monopine cell tower project proposed to be constructed on Ski Run Blvd may discharge to surface waters and

therefore the project proponent, Verizon/NEL, may be subject to waste discharge requirements under California Water Code 13260. My decision is to not issue a 13260 request for a report of waste discharge at this time because the project proponent proposes to perform periodic site inspections and collect/remove fallen faux needles from the cell tower site pursuant to TRPA permit requirements to ensure there is no migration of faux needles off site into the environment. This project has not been constructed yet, and there is no evidence before me to indicate that TRPA permit requirements are inadequate to prevent offsite discharge to surface waters. My team will, however, schedule joint inspections with TRPA and Verizon/NEL project operators to evaluate the efficacy of the TRPA permit requirements to protect water quality. We will make the decision to issue a request for a report of waste discharge if our inspections or other environmental data compel regulatory action by the Water Board.

My oft-stated concerns about visible and invisible MPs in soil and ground waters are omitted, though surface waters, including stream environment zones (SEZs), are also a great concern; Bijou Park Creek crosses Ski Run Blvd. at the Nel commercial property right-of-way, where it surfaces near the tower and commercial parking lot, and flows through the adjoining property below the sled hill. With winds often well in excess of 50 miles per hour, and extreme snow and ice conditions, I don't think it's speculative in the least to assert that plastic wastes from the 112-foot tower will blow or fall or be dragged or entrained in storm water, and end up contaminating soil, pavement, and water on and off the property site, including the down-gradient SEZ which flows to Lake Tahoe on the adjoining properties. Further information on the monopine towers, plastics involved, manufacturing and construction details, estimated tonnages, and other information is provided in the letter from Mr. Berg (see Attachment 1). Industrial MPs from the tower will flow to the SEZ and or Lake Tahoe in storm water. The TRPA permit requirements are cited as adequate, and you would prefer to take a "wait and see" approach, despite the facts we have already provided to TRPA and you in this matter. Before I go over some of those facts again let us examine the effect of your proposal.

The TRPA Permit Condition 11 was added just prior to the March 23, 2022 Appeal Hearing to attempt to address the potentially significant impacts to water quality they missed entirely from this and other monopine towers at Lake Tahoe until my associates and I pointed them out. Shortcomings of Condition 11 were pointed out in the Appeal letter from Eisenstecken, et. al, and my transcribed testimony from the Appeal Hearing of March 23, 2022, provided to you. TRPA did not address these shortcomings (a deficiency we are challenging

in federal District Court). In citing its action you simply assert its adequacy without an examination before the public.

What you must understand is that the sum total of your action, declining to issue section 13260 or other enforceable orders, is in effect setting a precedent, as follows: All Water Board requirements are informally waived for monopine towers and their industrial plastic and MP waste discharges. Such projects are only subject to TRPA permit requirements and conditions, which are deemed adequate by the Water Board (you). TRPA can then turn around and say, “look everyone, the Water Board has approved of our regulatory/permit program and requirements for industrial monopines. There is no reason for water quality concern.” That’s what we used to call “underground regulation,” strictly forbidden, so not something I know much about from experience. I did however, represent the Lahontan region circa 2000 (WDR Program), when waivers came under review statewide with the Legislated amendments to section 13269. (Though they have little understanding of and no formal regulatory program for microplastics, TRPA has at least put its permit requirement before the public , where it is being challenged.)

Impermissible Regulatory Programs

Further, in approving of TRPA’s sole oversight, it seems you could be establishing a regulatory program or regulation to waive requirements that is not only against sections 13260 and 13269, but also in effect promulgating regulations and requirements for controlling waste discharges for plastics in a manner against CWC section 13223, in relevant part:

§ 13223. [Delegation]

(a) Each regional board may delegate any of its powers and duties vested in it by this division to its executive officer excepting only the following: (1) the promulgation of any regulation; . . .

(b) Whenever any reference is made in this division to any action that may be taken by a regional board, such reference includes such action by its executive officer pursuant to powers and duties delegated to him by the regional board. (*Amended by Stats. 1970, Ch. 918.*)

The Office of Administrative Law (OAL) performs oversight functions over state agencies and is empowered to investigate regulatory deviations from the Administrative Procedures Act (APA), including “underground regulations” employed by state agencies, defined by 1 CCR, section 250(a), as follows: (a) “Underground regulation” means any guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule, including a rule governing a state agency procedure, that is a regulation as defined in Section

11342.600 of the Government Code, but has not been adopted as a regulation and filed with the Secretary of State pursuant to the APA and is not subject to an express statutory exemption from adoption pursuant to the APA.

As discussed in comments on section 13269 above, your proposed staff waiver for the proposed monopine tower at 1360 Ski Run Blvd. is, in effect, one or more of: a “guideline, criterion,” “instruction,” “standard of general application, or other rule” that has not been adopted in accordance with the APA. Under your proposal one may reasonably assume that if Water Board staff is subsequently contacted concerning an existing or proposed monopine tower project they will inform the enquirer or discharger that the Water Board has waived or deferred the project waste discharges to TRPA and no application for requirements or waste discharge reports to the Water Board are required. I would expect any application for waste discharge requirements filed by a discharger for a proposed monopine tower would simply be returned by staff, as was common during my employment at the Water Board, when waivers for some projects regulated by TRPA were actually in effect. We suggest employing your proposed staff waiver is an impermissible “underground” regulatory action under section 13223(a).

Best Available Technology (BAT)

Again, examining the details TRPA’s Condition 11, which you refer to implicitly:

“Proposed Special Condition 11 to Permit #ERS2019-0389

1. The permittee shall construct the monopine using the best available technology at that time to adhere all branches, bark, and needles to prevent shedding. The permittee shall maintain the monopine for as long as it is present in a condition consistent with the approved project plans. If any branches, bark, or needle clusters dislodge from the monopine then the materials shall be replaced using best available technology at that time. Material colors shall also be consistent with the approved project plans.
2. The permittee is responsible for keeping the site clean of material dislodged from the monopine for as long as the monopine is present. The site, and surrounding area, shall be inspected in the Spring after snow melt and in the Fall prior to snow fall and cleaned of all visible material dislodged from the tree including branches, bark, needle clusters and associated fragments. All collected debris shall be immediately removed from the site and disposed of properly.”

“BAT” is a term defined in the Clean Water Act for certain purposes under the NPDES Program, where it serves as a regulatory standard for controlling wastes

in storm water, for example. It has a legal meaning. “Best available technology” for constructing plastic monopines has not been defined, articulated, described, tested, evaluated, or publicly disclosed. An ad hoc requirement is applied by TRPA that was clearly demonstrated to be unmet on prior projects, the requirement to prevent shedding. Let alone shedding of flimsy needles, fiberglass reinforced PVC branches in excess of two inches diameter have been routinely ripped from the monopines by winter storms, under so-called “best available technology” – why would the industry be using anything less? What the meaning of “best” is, and who determines that, has not been articulated. Does best mean least toxic, given that most PVC is produced in China with toxic additives, such as lead and other toxic metals? Shouldn’t the materials have to be tested prior to deployment? Among competing manufacturers in a global PVC industry, who decides what is best? Is it the strongest, most flexible, or prettiest PVC? It can’t be known, as there is no info in the TRPA record concerning this.

Clearly, TRPA and TRPA alone, without going through any rulemaking process, promotes itself as the arbiter of what “best” means here: it is whatever TRPA decides it means, which is improper, no objective standard. So you would like to certify the TRPA’s condition requiring “best available technology” and twice annual cleanups as adequate to prevent impacts to water quality from prohibited waste discharges. But the Water Board has not gone through any regulatory process to examine what is “best available technology” for constructing monopines with plastics, and no findings are presented, just an assertion that TRPA’s somehow got it covered.

Twice-Annual Cleanups

While preventing shedding with BAT, Condition 11 requires the discharger to replace any lost materials to maintain the approved monopine appearance and, “if” any shedding is not prevented, to clean up any materials dislodged from the monopine in the Spring and Fall. (Despite use of best available technology, the materials can’t currently be prevented from being dislodged in large amounts, from tens of pounds to tons of plastic wastes annually, each tower.) These TRPA cleanup requirements come in two flavors: an offsite requirement to perform twice-annual clean-ups in the “surrounding area” and an onsite requirement for cleanups. The offsite cleanup requirement is evidence of a nuisance (as discussed in previous writings), and an explicit acknowledgement that uncontrolled wastes are expected to leave the Project site, where dumping is illegal and recovery is unlikely to fully succeed in any event, since the “surrounding area” includes municipal, public and private properties where the discharger can’t intrude itself at will for its industrial cleanup operations.

Since the plastic materials that are lost and replaced are not required to be accounted for in terms of mass, there is no accounting of potential waste discharges. Likewise there is no accountability, in term of mass, for what is cleaned up as litter during the twice-annual cleanup events. No requirements for waste accounting were imposed, and in fact no reporting requirements were issued concerning Condition 11, so the only verification is by TRPA inspections. While not meaning to malign well-meaning TRPA staff, we have no confidence in TRPA to do its regulatory job with the telecoms based on our experience.

With the proposed cleanups, we are concerned that workers could be exposed to lead and other highly toxic materials in the wastes deposited on land and in soil. The wastes are required to be “disposed of properly” but again with no criteria, and the TRPA required no testing of the materials it approved for the monopine. Because the workers performing cleanups may not be aware of handling waste with toxic constituents, toxic dust in the soil, they may expose themselves and others in the waste disposal stream, contaminate other wastes with toxic constituents, and violate other health and safety laws. Again, there is no known safe exposure for lead (Pb) potentially contained in PVC MPs. TRPA approved this Condition 11 without response to public input, making arbitrary and capricious assertions. We urge the Water Board to reconsider following their example.

We don’t know what would constitute a valid cleanup under Condition 11. It appears to be directed only at removing visible litter and branches dislodged from the monopine, “debris.” I have stated elsewhere to you that we are far more concerned with these tower wastes than with litter and fugitive “debris” only. We believe the monopines have and/or will shed toxic PVC and PVC-additives in storm water for the life of the towers, contaminating the soils with subvisible MPs in a zone around the tower. At the May 11, 2022 Water Board meeting my associate showed how the photo-degraded PVC needle materials essentially turn to dust over time. Any such materials will be unrecoverable, discharged uncontrolled, contaminating soils, runoff, surface waters, and “surrounding areas,” which include SEZ.

The Spring “debris” collection event will take place only after winter storms and runoff carrying wastes have ceased, and winter winds and snows have ravaged the tower. Both Spring and Fall waste collection will be frustrated by the faux plastic needles being mixed with fallen needles from the surrounding pine trees, so that they are likely to be co-collected and disposed of improperly, as ordinary pine needle waste, which it is not. Given the degradability of PVC needles under ambient conditions on the tower, and extreme weather and wind events in the Tahoe region, we ask you for articulation of the rationales for the conclusions

provided, as follows: the MP wastes will not migrate offsite (contrary to the TRPA permit), are fully subject to collection as “debris,” and will not pose toxic hazards to workers and others, such as the children who play at the commercial sled hill operated by Mr. Nel.

Co-investigations with TRPA of Existing Monopine Towers

While we are hopeful, in good faith, about your investigations into illegal discharges from wireless monopine towers we reported to TRPA and you, your proposal does not assure me that MPs will be examined at the sub-litter scale, and doesn’t uphold the laws you are uniquely charged and empowered to enforce for the Water Board with regard to the proposed and existing monopine towers.

The question in my mind is why you would propose following what seems poor legal advice. You should be able to accomplish the Water Board’s work without deviating from the law, which is so unnecessary. Following the law is mandatory and best for a great many reasons, not just a matter of duty. I don’t know your motivations here, but it seems perhaps you want to avoid speaking out against your agency-partner TRPA. I’m not asking you to do that. I would just never recommend what you propose, and I encourage you to stand for water quality leadership on this issue. Let them be accountable and work to correct their errors. It will blow over if they work to rebuild public trust and your trust, gratefully under new leadership.

I can understand you wanting to gather more information about the other existing monopine towers before engaging with the telecoms and their landowners. However, the section 13260 order is the perfect legal means to begin requiring the information from any discharger known or suspected to have discharged or be discharging due to operations and TRPA permit requirements (lacking controls for plastic wastes). Instead your proposed actions cut the public (me) out of what should be a public Water Board regulatory process while you conduct investigatory activities behind the scenes with our adversary, TRPA, in this matter.

As OAL indicates: “The regular rulemaking process includes comprehensive public notice and comment requirements. It also requires that documents and information on which the rulemaking action is based are available for review and inspection. This comprehensive process is intended to further the goal of public participation in the rulemaking process and to create an adequate rulemaking record for review by OAL and the courts.”

[\(https://oal.ca.gov/rulemaking_process/regular_rulemaking_process/\)](https://oal.ca.gov/rulemaking_process/regular_rulemaking_process/)

Whether a rule or permit action is involved, the APA applies.

We have no reason to trust TRPA about anything in this matter, especially under the current/ongoing management, as my associates' lawsuit with TRPA attests. Especially with no Water Board Orders, no public process, no seat at the table, we have no basis *for* trust. Further, you propose to do staff inspections (visual only, I assume) on monopine projects with TRPA permits where staff has no authority to inspect private property unless voluntarily granted or from "open fields," potentially tainting or missing evidence. The public and I will apparently only be able to be apprised of Water Board and TRPA activities subject to disclosure under the Public Records Act(s), long after the fact.

Request to Follow State Water Board Policy for Investigations and Cleanups

You are suggesting I and my associates should let the Water Board to do these inspections and work with TRPA in quietly resolving the investigation of prohibited plastics discharges in this matter when you have proposed a course of action not following the law, for reasons not made clear. We have no idea what your investigations will consist of. The State Water Board has a long-standing Policy for investigations and cleanups in Resolution No. 96_017-1, amending and supplementing Resolution No. 92-49. The findings in that Policy are hereby incorporated by reference, and in fact make my whole argument here for the proper path forward. The deviation from standard operating procedures you propose is inexplicable. We hereby formally request that you follow all applicable procedures in the Policy with regard to discharges of plastic wastes that have occurred in violation of Basin Plan prohibitions, and create or threaten to create conditions of pollution with toxics and other wastes, and a condition of nuisance. Citing from the CWC, section 13304 (as embodied in the Policy), in relevant part, provides:

"§ 13304. [Cleanup and abatement]

- (a) A person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall, upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. . . ."

We assert issuance of section 13304 orders is appropriate for the dischargers responsible for prohibited waste discharges at the Angel's Roost tower, the Hekpa Drive tower, the tower near the Meyers fire station, the "smoking guns" so-to-speak which we have identified, and any other existing towers you may be aware of that have discharged, or may be discharging, based on the factors in the Policy at I.A. – I.D. (Res. 92-49); which provides:

A. **Use any relevant evidence**, whether **direct or circumstantial**, including, but **not limited to**, evidence in the following categories:

1. Documentation of historical or current activities, waste characteristics, chemical use, storage or disposal information, as documented by public records, responses to questionnaires, or other sources of information; 2. Site characteristics and location in relation to other potential sources of a discharge; 3. Hydrologic and hydrogeologic information, such as differences in upgradient and downgradient water quality; **4. Industry-wide operational practices that historically have led to discharges**, such as leakage of pollutants from wastewater collection and conveyance systems, sumps, storage tanks, landfills, and clarifiers; **5. Evidence of poor management of materials or wastes, such as improper storage practices or inability to reconcile inventories; 6. Lack of documentation of responsible management of materials or wastes, such as lack of manifests or lack of documentation of proper disposal; 7. Physical evidence**, such as analytical data, soil or pavement staining, distressed vegetation, or unusual odor or appearance; **8. Reports and complaints; 9. Other agencies' records of possible or known discharge; and 10. Refusal or failure to respond to Regional Water Board inquiries;**

B. Make a reasonable effort to identify the dischargers associated with the discharge. It is not necessary to identify all dischargers for the Regional Water Board to proceed with requirements for a discharger to investigate and clean up;

C. Require one or more persons identified as a discharger associated with a discharge or threatened discharge subject to WC Section 13304 to undertake an investigation, based on findings of I.A and I.B above;

D. Notify appropriate federal, state, and local agencies regarding discharges subject to WC Section 13304 and coordinate with these agencies on investigation, and cleanup and abatement activities.

In the quote above I've bolded the types of information we've provided to the Water Board in correspondence and testimony concerning plastic wastes from

monopine towers, in addition to State policies and other information. You wrote, of the Ski Run Blvd. Project, “This project has not been constructed yet, and there is no evidence before me to indicate that TRPA permit requirements are inadequate to prevent offsite discharge to surface waters.” In stating this, the implication is you are not admitting the information and/or evidence we’ve provided as valid, or are not compelled by it. Either way, we think you should more thoroughly articulate the reasoning if you further intend not to issue orders to monopine MP dischargers in response to this letter. We further request you articulate the basis for declining to regulate each monopine tower, or all monopine towers, collectively. (The Policy serves as an exemplary regulation adopted in accordance with section 13223, an example to follow for establishing policies and requirements for regulating monopine towers in the future, rather than just promoting TRPA’s Condition 11 as adequate for all future monopine tower projects in an email to me and your staff.)

Suggested Path Forward

This is what we suggest: Put proposed and/or existing monopine tower dischargers under section 13260 and/or section 13304 orders, and obtain the information you need to find out what has occurred and assess issues of environmental contamination by MPs. Conduct studies of the water quality effects of the existing towers, perhaps as supplemented by study results through Columbia University, and then establish appropriate waste discharge requirements, regulatory policies for monopine towers and other sources of industrial plastics, and cleanup requirements. We don’t think the Water Board should be approving of any new monopine towers at Lake Tahoe when no requirements have been issued and no evidence has been presented that Lake Tahoe is not already adversely affected by PVC plastic wastes and associated MPs. There is no basis to conclude that, and reasons to suggest it may be, as plastics including PVC are not uncommon in aquatic environments. There is no evidential basis to deny potential impacts or approve of any additional impacts at this point. Again, we don’t understand your proposed approach to abating the prohibited discharges, because a basis for going outside of established Policy has not been articulated.

In order that you may better understand the threats posed by PVC plastics, I’m attaching some additional information in the form of annotated weblinks. I would just point out, that among the seven predominant types of plastics, PVC is third most-produced, and is considered to pose the greatest environmental threats, in part due to toxic additives. One of the links I’ll point out is a very recent settlement of a lawsuit by the Centers for Biological Diversity against the USEPA, in which the USEPA has agreed to consider listing PVC discarded to the environment as a hazardous waste pursuant to the Resource Conservation and

Recovery Act (RCRA). Whether they list it or not, we think the potential for plastic impacts on the aquatic and human environment at Lake Tahoe is very significant. I'm getting the sense that you share my concerns with plastics, and yet haven't given this the serious consideration it deserves, perhaps because of the newness of investigating soil and waters for MPs, and determining testing and clean-up levels (which are non-detection or background for the site per Res. 92-49). I don't think we know that soil is an effective filter for subvisible MPs or how far the MPs from these towers may extend.

While what follows doesn't mitigate these issues, as an interim work-around until Orders, if any, are issued, I would like you to consider and suggest adding to the Board's public Agenda, a Standing Item Report concerning MPs research, investigations, priorities, etc., as used to be common. Being retired, I would prefer to leave the investigations to the Water Board, more or less, if we had assurance that law and Policy was going to be followed.

That said, I'm very interested to find out what you discover and learn in the course of investigations, evaluating the monopine tower sites for evidence of MPs beyond visible plastics litter (which alerted violators could be hiding as I write) for subvisible nanoplastics in the soil and waters. However challenging that may be for the dischargers, there are now methods available. To quote a CA water quality leader, "Plastics break up, they don't break down." These discharges have been going on a long time, decades, in some cases. We invite you to work with us to develop and understand the research offered by Columbia University.

You can always change your mind based on additional consideration, new information and so forth. Think it over. More monopine towers will likely be proposed. This Verizon Project is the right case to fulfill your charge to begin regulating them. It's also a time for new leadership at TRPA, to match (belatedly) your arrival in the Tahoe Basin, and a chance to forge your new alliances thoughtfully. We urge your reconsideration to choose a different path forward and look forward to your response.

Sincerely, Alan Miller, PE

Attachment 1: Berg Letter of March 25, 2022

Attachment 2: Berg email correspondence

Attachment 3: PVC Info (Annotated Weblinks)