# Jay Mountain Wilderness UMP Amendment Response to Public Comments

## **Policy/Legal Issues**

Comments: The UMP Amendment is not legally valid. Contention that passage of Proposition 5, Constitutional Amendment "implicitly" repeals all other state laws regarding this Lot 8 is incorrect. The 2013 Constitutional Amendment is permissive not mandatory. Do not proceed without due legal process.

Response: Upon the adoption of a constitutional amendment, all statutes and regulations that are inconsistent with the approved constitutional amendment become abrogated and are therefore nullified. The legal authority to amend the UMP is the constitutional amendment itself, which was voted on and approved by the citizens of the State of New York.

Comment: DEC should not ignore its own TRP Policy. DEC should not issue the TRP because it is violation of the DEC's TRP Policy.

Response: The TRP policy (ONR-3) specifically allows the Department to issue permits for "surveying State land for exploration purposes, including...mineral exploration."

Comment: More stringent terms and conditions must be included in the TRP and associated documents to protect forest preserve ecosystems and wilderness values. The terms and conditions fail to address probable adverse impacts on Wilderness lands, wildlife and invasive species.

Response: This TRP goes above and beyond the normal requirements of a TRP. The TRP included a SEQRA review, underwent public review and includes comprehensive supporting documentation. Based on public comment and internal review the TRP has been modified. See specific comments for TRP changes.

## **SEQRA and UMP Process**

Comment: The Jay Mountain Unit Management Plan (UMP) should not be amended without sufficient time for public hearings, and public comment. Public hearings should be held statewide so that those affected can voice their concerns for the public record.

Response: The UMP amendment was released for public comment on April 2, 2014. The public comment period closed on May 30, 2014. Comments were accepted by email, letter and telephone. Comments were received from across the state and are part of the public record. Comments are summarized in this document.

Comment: Cumulative impacts need to be addressed with NYCO's existing Lewis mine and proposed Derby Brook expansion.

Response: The action under consideration is the exploration of Lot 8, and not the proposed mining of Lot 8. The SEQR review of the DEC issued mining permit will address NYCO mining operations in the area, and if necessary provide an evaluation of the cumulative impacts with both mine sites being considered.

Comment: Turning 200 acres of wilderness into an industrial mining site requires preparation of a thorough Environmental Impact Statement (EIS).

Response: The TRP and UMP amendment are for mineral exploration only. They are not for mining minerals in Lot 8. Through the SEQRA review process significant impacts and mitigation of impacts related to mineral exploration on Lot 8 have been addressed.

Comment: The Draft UMP amendment does not meet the SEQRA requirement of a full Environmental Assessment Form (EAF). The Draft UMP fails to satisfy the requirements of SEQRA. SEQRA requires more thorough study, documentation, analysis and mitigation than is provided in the UMP Amendment, TRP, and Work Plan.

Response: Required SEQRA documents including a long form EAF have been prepared for the TRP and the UMP Amendment.

The UMP amendment is part of a larger UMP that includes an inventory of natural resources including physical resources, biological resources, visual/scenic resources, and critical habitat. Natural Heritage program maps were reviewed for occurrences of rare, threatened and endangered species on Lot 8. DEC and Natural Heritage personnel have made field trips to the site to inventory trees and evaluate the occurrence of for old growth. DEC staff conducted a 22 plot tree inventory.

#### **Need for Additional Research**

DEC must conduct baseline studies of flora, fauna, and water resources, including but not limited to: threatened & endangered migratory bird species, threatened and endangered salamander and other amphibian species, endangered plant species, and an inventory of old growth trees.

The UMP amendment is part of the 2010 Jay Mountain Wilderness Unit Management Plan. The UMP includes an inventory of natural resources including physical resources, biological resources, visual/scenic resources, and critical habitat. Natural Heritage program maps were reviewed for occurrences of rare, threatened and endangered species on Lot 8. DEC and Natural Heritage personnel have made field trips to the site to inventory trees and evaluate the occurrence of old growth forest stands.

The mineral exploration activity will take place on 7.3 acres of the 200 acre lot (3.6% of Lot 8, .09% of the Jay Mountain Wilderness Area). Disturbance of the 7.3 acres will be kept to a minimum, wetlands and surface water will be avoided. A majority of the lot will remain intact and undisturbed. This undisturbed area will serve as benchmark for restoration of the disturbed areas.

Comment: DEC has not conducted adequate baseline studies of flora, fauna, and water resources on Lot 8. These data are necessary for adequate description of environmental impacts and baseline for future restoration. Parameters include: land contours, drainage

patterns, soil characteristics, extent and location of wetlands and surface water, threatened and endangered species, migratory birds, breeding birds, mature trees, old growth forests.

Response: The UMP amendment is part of a larger UMP that includes an inventory of natural resources including physical resources, biological resources, visual/scenic resources, and critical habitat. Natural Heritage program maps were reviewed for occurrences of rare, threatened and endangered species on Lot 8. DEC and Natural Heritage personnel have made field trips to the site to inventory trees and evaluate the occurrence of for old growth. Aerial surveys were conducted this year and contour maps have been prepared by NYCO.

Comment: DEC has not adequately identified likely natural resource and ecosystem impacts from the proposed mineral sampling. Impacts include: impacts to wildlife, creation of new edge habitat, visual impacts, scenic impacts, impacts on recreation, soil compaction.

Response: Through the SEQRA review process it was determined that there were no significant impacts resulting mineral exploration activities on Lot 8.

## Forest/Vegetation/ Tree cutting

Comment: TRP special term 11, "disruption of vegetation shall be kept to a minimum," is too vague.

Response: Department staff will be on-site when access corridors and drill pad sites are being developed to ensure that disruption of vegetation is kept to the minimum necessary.

Comment: Need comprehensive inventory and analysis for old growth forests. The Old Growth report is seriously flawed.

Response: To be considered old growth a stand must meet all nine criteria of the definition of old growth. After careful field investigation and completion of a forest inventory the determination has been made that this area does not meet all nine criteria and is clearly not an old growth forest. From the historical record for this site and evidence on the ground this area was likely clearcut for charcoal production in the 1880's to supply nearby iron mills.

Comment: Make the wood from trees cut available to the public for heating.

Response: The constitutional amendment authorizing mineral exploration on Lot 8 does not extend to making wood available for the public.

Comment: Identify Type and density of native plant communities, including full census of mature trees.

Response: DEC has conducted a forest inventory of Lot 8 and tallied all trees approved to be cut within the 7.3 acres where mineral exploration is proposed.

Comment: Tree removal limitations are described inconsistently between the work plan and the TRP. It is unclear if 1254 trees include trees to be cut at pad sites. DEC not NYCO should determine which tress need to be cut. A DEC forester should mark and tally all trees. Relocate drill pads to avoid trees over 12" dbh. TRP special terms should require avoiding trees more than 100 years old. Cutting of 1254 trees is too many.

Response: The tree tally listed includes all trees that might be cut from both the access corridors and the pad sites. For access corridors all trees within a 20 foot corridor were tallied to include any tree that might be cut. At the time of access corridor establishment only those trees that absolutely need to be cut will be. On straight, level areas the access corridors will only be 12 feet wide resulting in less trees cut for that section. Where access corridors meander due to terrain, or to avoid large trees, a width of 15 feet will be needed. Only on tight turns will the full 20 foot corridor be needed (See further discussion of access corridors below). Therefore, the number of trees cut will be less than 1254. Likewise, the area disturbed by this operation will likely be less than 7.3 acres.

All trees tallied have been identified on the ground by a Department Forester.

Efforts to avoid all trees were made in the initial layout of access corridors and pad sites. Where tree cutting could not be avoided, efforts were made to avoid larger trees.

## Comment: NYCO should provide mitigation for all cut trees.

Response: If a land exchange with NYCO for Lot 8 does not occur, NYCO will be required to purchase land equivalent to the area disturbed by mineral exploration activities and donate the land to the State of New York for inclusion in the Forest Preserve.

Comment: The width of the access path is described inconsistently (15feet, 10 feet, 20 feet). Corridor sections should only be as wide as necessary.

Response: Access corridors can be up to twenty feet wide where necessary. At the time of corridor establishment access corridors will be cut only to the minimum width necessary. On straight level sections, corridor width of 12 feet will be adequate. Where corridors meander due to terrain, or to avoid large trees, a width of 15 feet is necessary to accommodate the drilling equipment. Only in areas of tight turns, will a 20 foot corridor be required. Average corridor width will be 15 feet. No corridor will be larger than 20 feet wide.

#### **Wetlands**

Comment: The wetlands assessment performed by APA staff does not adequately document existing water resources in Lot 8.

Response: The wetland assessment is based on the best information available. To ensure protection of the water resources on Lot 8, access corridors and drill pad sites will avoid wetlands and surface water to the extent possible. Routes and pad sites have been marked on the ground. APA wetland staff will visit the site to evaluate the locations and coordinate with DEC

to move corridors or pad sites that could have a significant impact on water resources. Aerial surveys were conducted this year and contour maps have been prepared by NYCO.

## Wildlife

Comment: Identify numbers and location of threatened and endangered species. Identify number and location of migratory birds.

Response: Commenter positively identified 16 bird species, and tentatively identified one additional bird species. This is a reasonable result of a mid-day singing bird survey in northern hardwood forest, and undoubtedly additional avian species are present which would be documented by more extensive surveys. The NY Breeding Bird Atlas documents 76 bird species that are confirmed, probable, or possible breeders in the project area.

Comment: TRP start date should be deferred until after the primary nesting season of migratory birds (mid-June to mid July) to avoid killing migratory birds.

Response: The TRP will prohibit site disturbance activities before July 16, 2014.

Comment: According to "The Second Atlas of Breeding Birds in New York State" the black-throated blue warbler, veery, scarlet tanager, and wood thrush are sensitive species with declining populations.

**Response:** The Black-throated Blue Warbler, Scarlet Tanager, and Wood Thrush are designated as New York Species of Greatest Conservation Need (SGCN). As part of a 10 year update of the State Wildlife Action Plan, all SGCN have been assessed by a panel of experts in each taxa. The avian taxa assessment meeting was held in August 2013, and provides recent information on the status and trends of each species.

Black-throated Blue Warblers are designated by the Natural Heritage Program as secure at both the global and state levels, with a population estimated at 2 million. The New York assessment indicates Black-throated Blue Warblers population is increasing in North America, the Northeast Region, New York, and neighboring states, except Massachusetts and Vermont, where the population is stable, and New Jersey, which does not have a population of this species. The avian expert committee determined the species to be fairly common. Black-throated Blue Warblers occur in 26-50% of New York State, and New York contributes 11-25% of the North American range. The Partners in Flight North American Landbird Plan does not designate the species as a Watch List species.

Scarlet Tanagers are designated by the Natural Heritage Program as secure at both the global and state levels, with an estimated population of 2.2 million. It was determined by the avian expert committee to be fairly common, with Stable abundance and distribution at the North American, Northeast Region, and New York levels. It is declining in abundance in Connecticut, Massachusetts, Pennsylvania, Quebec, and Vermont, and increasing abundance in New Jersey. Distribution is stable in all of these jurisdictions except Quebec, where it is declining. It occupies more than 50% of New York, which makes up 6-10% of the North American distribution. The Scarlet Tanager is not designated as a Partners in Flight Watch List species.

Wood Thrush are rated by Natural Heritage as secure at both the global and New York levels, with a population estimated at 14 million. The avian expert committee determined that abundance and distribution of the Wood Thrush is in moderate decline. Wood thrush occupy more than 50% of New York, and the New York population is 6-10% of the North American population. It was determined by the avian expert committee to be fairly common, with a moderate decline in abundance and distribution at the North American, Northeast Region, and New York levels, as well as in neighboring states.

<u>Veery</u> are not designated as a Species of Greatest Conservation Need by New York, but is designated as a Regional SGCN by the Northeast Wildlife Diversity Technical Committee. Veery are on a Watch List species, but only in Bird Conservation Region 16, which is the Southern Rockies and Colorado Plateau. Veery are not a species of conservation concern for Bird Conservation Region 14, the Atlantic Northern Forests, which includes the Adirondacks. The Veery population is estimated at 14 million.

Commenter reported that he believes he heard a <u>Bay-breasted warbler</u>. This species is considered to be rare in New York, but has been previously documented in Essex County by the Breeding Bird Atlas. It occupies less than 5% of New York, and New York is less than 5% of the North American population. The Bay-breasted warbler population varies widely in size, and it is currently increasing in North America and the Northeast Region, but declining in New York and neighboring states.

Comment: The TRP should require a written forest and migratory bird protection plan. DEC should require NYCO to create a fund for purchase of land that will add to the Adirondack interior forest blocks and private high value habitat equivalent to that impaired by NYCO's activities.

Response: The bird species described as sensitive are all forest birds, preferring closed canopy and an understory layer. These forest bird species will most likely be directly impacted by the proposed mineral sampling activities, and the additional edge habitats created by the openings in the forest canopy. While some of the bird species identified in the comments and the Breeding Bird Atlas prefer unfragmented forest habitat, other species present at the site are habitat generalists and will benefit from the additional edge habitat created by the mineral sampling activities. The project impacts to birds will be local, and are not expected to cause a population level impact to any bird species resident in the area.

If a land swap with NYCO for Lot 8 does not proceed NYCO will be required to purchase land equivalent to the area disturbed by mineral exploration activities.

Comment: Mineral exploration will impact herpetofauna, including amphibians present on Lot 8; wood frog, green frog, spring peeper, eastern red-spotted newt, and spotted salamander.

Response: Each of these species is widespread and common in New York State, and none of them are designated as Species of Greatest Conservation Need. Dr. Patrick notes the importance

of vernal pools to the successful reproduction for these species. The mineral sampling activities are likely to impact the resident herpetofauna, and care will be taken to minimize project activities in the wetland and vernal pool habitats, but there are no expected population-level impacts from the mineral sampling project.

## **Invasive Species**

Comment: TRP special term 16, sterilization of tools and equipment alone is insufficient to prevent spread of invasive plants. Clearance of vegetation opens opportunities for invasive or otherwise destructive wildlife. TRP should require a written invasive species plan. If mining is not anticipated after sampling is complete the TRP should require implementation of an invasive species plan.

Response: The TRP has been expanded to include additional BMPs for control and management of invasive species. The first step in managing invasive plant species is to prevent introduction. Sterilization of tools and equipment prior to entering the site is the best way to prevent introduction of invasive species.

After prevention, the best way to control invasive species is through early detection rapid response. The DEC will monitor the disturbed areas of Lot 8 for occurrence of invasive species as long as it is in state ownership. Any detection of invasive species will be managed in accordance with the "Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park."

#### **Edge Effect**

Comment: The work plan fails to account for edge effect and associated tree cutting on the wilderness lands adjoining lot 8. The plan does not adequately address creation of forest edge and the impact from the "edge effect." DEC should prohibit construction of drill pads and access corridors within 100 meters of the Lot 8/wilderness boundary.

Response: The TRP has been changed to prohibit any physical site disturbance within 100 meters of the adjoining wilderness boundary.

While some of the bird species identified in the comments and the Breeding Bird Atlas prefer unfragmented forest habitat, other species present at the site are habitat generalists and will benefit from the additional edge habitat created by the mineral sampling activities. The tree removal required for mineral sampling will convert some areas of site from mature forest to an earlier stage of forest succession, which will likely cause a shift in the avian species present on the site to those that favor early successional forest. But the overall abundance and diversity of bird species at the site is more likely to increase rather than decrease due to the mineral sampling.

# **SWPPP- Water Quality/ Soils/Erosion**

Comment: Implementation of improved erosion and sedimentation controls should be included in TRP.

Response: The erosion and sediment controls outlined in the SWPPP conform to the New York Standards and Specifications for Erosion and Sediment Control (August 2005 edition). Including these controls in the TRP would be redundant and not provide any additional environmental protection.

Comment: Even if mining does not proceed there will be adverse water quality and ecosystem impacts from deforestation and forest fragmentation.

Response: Adverse impacts are not expected to result from mineral exploration on lot 8. The TRP contains terms and conditions for the protection of the resource. Creation of access corridors and pad sites will not result in forest fragmentation or deforestation. A closed loop system is being used to prevent water quality impacts. The SWPPP contains pollution prevention practices that will be adhered to during mineral exploration.

Comment: The SWPPP should be revised to state that all BMP's and stormwater control measures will comply with the NYS Stormwater Design Manual.

Response: Post-construction stormwater controls are not required because the access corridors and drilling pad sites are only temporary. After the completion of mineral exploration activities, the access corridors and pad sites will be seeded and mulched and thus reclaimed as vegetated open space.

Comment: The SWPPP should include engineering plans showing site-specific or typical drawings of sediment control structures. The SWPPP should show site plans with cut and fills, parking, impervious surfaces, storage areas and other areas that may potentially come into contact with stormwater.

Response: Figure 3 in Attachment B of the SWPPP shows a typical drawing of a drilling pad site. The drawing was prepared before a decision was made to require a closed loop system. The drawing identifies the location of silt fence (a temporary sediment control structure), water sumps (cut areas), sump excavation material storages (fill areas), drill rod storage areas, and drill rig parking areas. The typical drawing will be modified to show a closed loop system before the TRP is issued. No impervious surfaces will be created. Given the uniform characteristics of the drilling pad areas, the Department feels that site-specific drawings are unnecessary.

Comment: The SWPP should include specific drainage plans showing existing and modified flow paths of the stormwater.

Response: The Department agrees. SPDES Permit No. GP-0-12-001 Part III.C.6.g requires that the site map identify the directions of stormwater flow using arrows. The SWPP will be updated.

Comment: Maps should be provided showing an expanded scale to show proximity to surface waters as evidence that potentially contaminated stormwater will not reach such areas.

Response: SPDES Permit No. GP-0-12-001 Part III.C.6 does not require this level of detail. Part III.C.6.h only requires that receiving waters in the immediate vicinity be mapped.

## Comment: The revised SWPPP should be reviewed and approved by the DEC.

Response: SPDES Permit No. GP-0-12-001 does not require that SWPPPs be reviewed and approved by the Department. Rather, Part V.H.4 of the permit relies on self-certification by the permittee. However, the Department recognizes the importance of this SWPPP and thus has had staff reviewing for compliance.

#### **Drilling**

Comment: Require a thorough analysis of the impact of the drilling lubricants to be used at the test bore sites, along with a plan for reclaiming the drilling lubricant waste fluids, and preventing contamination of the surrounding lands, should no commercially viable mining product be discovered as a result of the test bores.

Response: A closed loop pitless drilling system will be utilized. All drilling fluids and cuttings are contained at the surface within piping, separation equipment and tanks. No fluid discharges to the ground are allowed. All fluids used during the coring and drilling process will be captured and properly disposed of offsite. Material Safety Data Sheets (MSDS) for all potential drilling fluids is contained in the appendices of the TRP. The SWPPP contains pollution prevention practices that will be adhered to during mineral exploration.

Comment: Lot 8 overlies or is in close proximity to one of the largest stratified aquifers in eastern Adirondacks, serving Northern new Russia, Elizabethtown, and areas north into Lewis. There are no conditions imposed to protect the aquifer from blowouts, spills, or other accidents.

Response: The Department's GIS coverage shows that the aquifer described in the comment is approximately 1.5 miles east/southeast of the nearest proposed core hole and that the aquifer is not present on Lot 8. The TRP requires that any spills must be reported to DEC immediately and that NYCO will contain and remediate all accidental spills.

#### Comment: Require pad liners and secondary containment for noxious fluids.

Response: A closed loop pitless drilling system will be utilized. All drilling fluids and cuttings are contained at the surface within piping, separation equipment and tanks. No fluid discharges to the ground are allowed. All fluids used during the coring and drilling process will be captured and properly disposed of offsite. The Department's TRP requires the use of drip pans under all drilling equipment.

Comment: Page 1 of the Work Plan states that phase 2 proposed drilling "comprises a group of holes closer to Lot 8's existing boundary. In fact three of the five holes to be drilled during phase 2 (9-11) extend access corridors toward the center of the tract. This should be corrected.

Response: Although Phase 2 holes 9 - 11 are more toward the center of Lot 8 than many other wells in the coring program, the holes are in fact closer to Lot 8's existing boundaries to the south and east. The text is correct as written.

Comment: The TRP special terms should prohibit EZ-MUD and EZ-MUD Gold because they are not readily biodegradable.

Response: The Department spoke with NYCO on this issue and NYCO has agreed to not use EZ-Mud or EZ-MUD Gold for this project.

Comment: The TRP special terms should prohibit the use of AMC CR 650 and EZ-MUD because they are known to be toxic or their toxicity is unknown.

Response: The Department spoke with NYCO on this issue and NYCO has agreed to not use EZ-Mud or EZ-MUD Gold for this project. AMC CR 650, if used, will be contained at the surface within piping, separation equipment and tanks. No fluid discharges to the ground are allowed. Please note that CR 650 is approved by NSF (National Sanitation Foundation) for use in water well drilling provided that it is flushed out of the water well prior to use. CR 650 and other drilling fluids will be captured in the closed loop system and properly disposed of offsite.

Comment: DEC should deny authorization to use any additive that is shown to be toxic when dissolved or suspended in water. DEC should decline to allow use of drilling additives if full information is not available to the public.

Response: A closed loop pitless drilling system will be utilized. All drilling fluids and cuttings are contained at the surface within piping, separation equipment and tanks. No fluid discharges to the ground are allowed. All fluids used during the coring and drilling process will be captured and properly disposed of offsite. Material Safety Data Sheets (MSDS) for all potential drilling fluids is contained in the appendices of the TRP.

Comment: The TRP special terms should state the TRP will be immediately revoked if prohibited drilling additives are used.

Response: The Department will closely monitor additives used and will suspend or revoke the TRP if any products used in the coring process were not described/included in the Plan.

Comment: TRP special terms should prohibit the use of drilling additive not previously authorized by DEC.

Response: The Department will closely monitor additives used and will suspend or revoke the TRP if any products used in the coring process were not described/included in the Plan.

Comment: DEC should require that all drilling waters will be recycled.

Response: A closed loop pitless drilling system will be utilized. All drilling fluids and cuttings are contained at the surface within piping, separation equipment and tanks. No fluid discharges

to the ground are allowed. All fluids used during the coring and drilling process will be captured and properly disposed of offsite. Drilling waters will be recycled and used in the coring of subsequent wells. Any water remaining at the end of the coring project must be disposed of properly using a licensed hauler in accordance with 6 NYCRR Part 364 requirements.

Comment: The work plan should state that a waste transporter permitted under Title 6, Part 360, of the New York Codes, Rules and Regulations (NYCRR) will haul any leftover fluids and solid waste. Leftover fluids will be hauled to a waste disposal facility permitted under the State Pollution Discharge Elimination System (SPDES), 6 NYCRR Part 750.

Response: The TRP requires leftover fluids and/or solid waste must be disposed of properly at the appropriate facility by a licensed hauler.

Comment: The TRP should prohibit onsite discharge of any drilling fluids, wastewater, or industrial wastes to waters of the state, including groundwater unless a SPDES permit is obtained.

Response: A closed loop pitless drilling system will be utilized. All drilling fluids and cuttings are contained at the surface within piping, separation equipment and tanks. No fluid discharges to the ground are allowed. All fluids used during the coring and drilling process will be captured and properly disposed of offsite at an appropriate facility.

Comment: TRP should require secondary containment for toxic fluids or semi-fluids, including mandatory use of drip pans for all equipment.

Response: A closed loop pitless drilling system will be utilized. All drilling fluids and cuttings are contained at the surface within piping, separation equipment and tanks. No fluid discharges to the ground are allowed. All fluids used during the coring and drilling process will be captured and properly disposed of offsite. The Department's TRP requires the use of drip pans under all drilling equipment.

Comment: There is no prevention or emergency spill plan for spills of used drinking water, drilling muds, cement, fuel, etc. The TRP should state that DEC will revoke the permit if spills are not reported immediately or cleaned up completely within 24 hours.

Response: The TRP requires that any spills must be reported to DEC immediately and that NYCO will contain and remediate all accidental spills. Failure to do so will result in the suspension of the coring work until the remediation work is completed or the revocation of the TRP.

Comment: The work plan should describe how the drill cuttings will be disposed of, and NYCO should describe how drill cuttings will be containerized and list the permitted landfills that are expected to take drill cuttings.

Response: The work plan does address disposal of drill cuttings. According to the Plan, drill cuttings removed from portable sediment troughs will be containerized and disposed at a NYS

approved landfill. Drill cuttings will be removed from the sediment trough by hand and then placed in containers to be hauled offsite.

Comment: The TRP should prohibit NYCO from directly disposing of any drill cuttings or other solid waste, onsite or offsite unless it first obtains a permit to do so under 6 NYCRR Part 360.

Response: A closed loop pitless drilling system will be utilized. All drilling fluids and cuttings are contained at the surface within piping, separation equipment and tanks. No fluid discharges to the ground are allowed. All fluids used during the coring and drilling process will be captured and properly disposed of offsite. The work plan does address disposal of drill cuttings. According to the Plan, drill cuttings removed from portable sediment trough will be containerized and disposed at a NYS approved landfill.

Comment: The TRP should require removal of any above grade pipe so that evidence of human activity is not visible on the surface.

Response: The marker pipes installed to identify the core hole locations will be cut off below grade if, the land exchange for Lot 8 does not take place.

#### **Site Restoration**

Comment: The TRP and UMP amendment do not provide accurate and comprehensive description of existing conditions on Lot 8. Documentation is needed for baseline and benchmark for restoration. A qualified professional is needed to document baseline.

Response: The UMP amendment is part of a larger UMP for the Jay Mountain Wilderness that includes an inventory of natural resources including physical resources, biological resources, visual/scenic resources, and critical habitat. Natural Heritage program maps were reviewed for occurrences of rare, threatened and endangered species on Lot 8. DEC and Natural Heritage personnel have made field trips to the site to inventory trees and evaluate the occurrence for old growth forest stands.

The mineral exploration activity will take place on 7.3 acres of the 200 acre lot. Disturbance of the 7.3 acres will be kept to a minimum, wetlands and surface water will be avoided. A majority of the lot will remain intact and undisturbed. This undisturbed area will serve as benchmark for restoration of the disturbed areas. Information on drainage and vegetation has been collected on the corridors and pad sites.

Comment: If mining is not anticipated after sampling, the following requirements should be imposed: mitigation measures to protect water resources, soils, vegetation, wildlife habitat and ecosystems, implementation of an invasive species plan, Implementation of a written restoration plan, periodic inspections to ensure success, and payment of natural resource damages.

Response: The disturbed area will not exceed 7.35 acres of the 200 acres. NYCO will be required to restore and stabilize each disturbed area to control sediments, prevent erosion and

protect water quality. If a determination is made that DEC and NYCO are not going to proceed with a land swap then a full restoration plan will be developed and put into action. The restoration plan will include long term monitoring and maintenance.

Comment: The UMP should contain a clear plan for reclaiming the 200 acre parcel (i.e. removal of drill pads and roads, replanting of disturbed areas, long term monitoring, ongoing maintenance, etc), if no commercially viable mining product is discovered as a result of the test bores. The work plan only refers to reclaiming disturbed areas by seeding and mulching.

Response: The disturbed area will not exceed 7.35 acres of the 200 acres. NYCO will be required to restore and stabilize each disturbed area to control sediments, prevent erosion and protect water quality. If a determination is made that DEC and NYCO are not going to proceed with a land swap then a full restoration plan will be developed and put into action. The restoration plan will include long term monitoring and maintenance. The work plan will be updated to clarify.

Comment: TRP special terms 14, 17, 18 refer to required restoration. Genuine restoration is not possible without baseline documentation. TRP should require submission of a comprehensive written restoration plan to return the site to baseline conditions.

Response: The mineral exploration activity will take place on 7.3 acres of the 200 acre lot. Disturbance of the 7.3 acres will be kept to a minimum, wetlands and surface water will be avoided. A majority of the lot will remain intact and undisturbed. This undisturbed area will serve as benchmark for restoration of the disturbed areas.

Comment: The timing of restoration is described inconsistently. The work plan should state consistently that site by site restoration of each drilling site will be completed in its entirety immediately following conclusion of drilling activity and that access corridors will be restored completely as soon as they are no longer needed to reach drilling sites.

The disturbed area will not exceed 7.35 acres of the 200 acres. NYCO will be required to restore and stabilize each disturbed area to control sediments, prevent erosion and protect water quality. If a determination is made that DEC and NYCO are not going to proceed with a land swap then a full restoration plan will be developed and put into action. The restoration plan will include long term monitoring and maintenance.

Comment: If mining is not anticipated after sampling is complete the TRP should require mitigation measures for impairment of wetlands, streams, vernal pools, and other water resources; degradations of soils; and harm to native vegetation, wildlife, habitat and ecosystems.

Response: If a determination is made that DEC and NYCO are not going to proceed with a land swap then a full restoration plan will be developed and put into action. The restoration plan will include long term monitoring and maintenance. The TRP will require NYCO to post a performance bond.

Comment: If mining is not anticipated after sampling is complete the TRP should require implementation of a restoration plan. If mining is not anticipated after sampling is complete the TRP should require quarterly inspection for the first three years and annual inspection for the following ten years.

Response: If a determination is made that DEC and NYCO are not going to proceed with a land swap then a full restoration plan will be developed and put into action. The restoration plan will include long term monitoring and maintenance.

#### Noise/Light/Scenic

Comment: Document existing light levels and avoid or mitigate light levels which may increase if artificial illumination is needed for operations, with potential adverse impacts on wildlife. Document existing noise levels in Lot 8. Avoid or mitigate noise levels which will significantly increase with use of motorized equipment and drilling activities. With potential impacts on black bear foraging, recreationists, neighbors.

Response: Wildlife including birds, bats, and overwintering bears will likely be impacted by the noise and light of the mineral sampling equipment, just as they can be impacted by the myriad other sources of human noise and light. This disturbance will be minimized spatially and temporally, but is not expected to cause lasting impacts nor population level effects for any wildlife species.

Comment: Felling of trees for dirt roads and well pads will be visible from within Lot 8, major roadways, Route 87, nearby peaks and bluffs.

Response: There will be minimal visual impact from the mineral exploration activities. Trees will be felled, but roads will not be constructed. A closed canopy is anticipated over most of the access corridors. More trees will be removed at the well pad sites, making some well pad sites visible from higher elevation vantage points. This will be a temporary impact until the sites become revegetated and the canopy closes over the openings. The trees removed will be designated by a DEC forester and kept to the minimum amount necessary for operation of the drill pad.

Comment: TRP special term 19, is not sufficient to simply state that "noise and lighting associated with the project will need to be mitigated to the greatest extent possible." A noise and lighting mitigation plan should be required addressing impacts to the site, wildlife, neighbors, and recreationist.

Response: The wording has been changed in the TRP, restricting lighting and drilling activity (noise) to only one pad site at any one time.

Comment: The hours of drilling are described inconsistently (24hrs, 12hour shift, 10 hour day). To limit duration of noise and light impacts TRP should limit drilling to 10 hours/day.

Response: There is a tradeoff between less hours of drilling for more days or drilling longer hours and impacting the site for fewer days. To minimize the amount of time the site is disturbed, drilling activity will operate 24 hours day, 6 days a week. Mineral exploration activity will be prohibited on Sundays and federal holidays. The documents will be corrected to make them consistent.

#### **Recreation/Wilderness**

Comment: This will ruin one of the last pristine wildernesses in New York State. This will have a negative impact on tourism dollars.

Response: The Jay Mountain Wilderness is adjacent to NYCO's operating wollastonite mine in the Town of Lewis. Allowing mineral exploration on Lot 8 will not significantly impact the Jay Mountain Wilderness any more than the adjacent mine impacts Lot 8. The Jay Mountain Wilderness is one of 25 wilderness areas in the State of New York. Mineral exploration on Lot 8 should not adversely impact wilderness based tourism in New York.

Comment: Recreational, aesthetic, and experiential opportunities for solitude and sense of remoteness in a wilderness setting will be eliminated entirely in and near lot 8.

Response: Mineral exploration will have an impact on users looking for a sense of remoteness in a wilderness setting near Lot 8. This will be a temporary impact from July 16<sup>th</sup> until mineral exploration activity is completed late summer/early fall. Recreationists will either cope with the disturbance during this time or be displaced to other areas of the forest preserve.

#### Miscellaneous

Comment: TRP special term 20 specifies the need for a safety barrier. Specifics need to be provided to ensure the safety barrier does not disturb land, vegetation, wildlife.

Response: The wording has been changed in the TRP, restricting safety barrier to signs, rope and caution tape. No impacts are anticipated.

Comment: The area of disturbance is described inconsistently it is listed as 7.3 acres and 5.35 acres.

Response: The correct number is 7.35 acres. Documents will be corrected.

Comment: Mineral exploration will have a negative impact on lot 8 and the environment. The TRP special terms should prohibit any impacts outside Lot 8.

Response: Mineral exploration activities including tree cutting and drilling will have a temporary impact on the environment and solitude of Lot 8 and adjoining lands. However, an impact does not automatically mean an adverse environmental effect. DEC will assess the impacts for the sampling and any subsequent activities at the site to ensure there is no net loss of natural resources in the Forest Preserve. The TRP only permits mineral exploration activity to a very limited section of Lot 8 consisting of 7.35 acres. Exploration related disturbance outside the permitted areas is prohibited by DEC regulations.

Comment: If mining is not anticipated after sampling is complete the TRP should require payment of natural resource damages.

Response: If an exchange of land for Lot 8 does not occur NYCO will be required to purchase land equivalent to the area disturbed by mineral exploration activities and donate the land to the State of New York for inclusion in the Forest Preserve.

Comment: Support for the proposed land swap was based on factors including: 1) The proposed exchange must be narrowly defined, specific in purpose, limited in scope and be supported by public policy objectives, 2) the exchange parcel would have superior ecological, biological values, locational qualities, 3)Lot 8 cannot have unique biological or hydrological features or critical wildlife pathways.

Response: If a land swap with NYCO for Lot 8 does not proceed, DEC will work with NYCO to obtain a parcel that is of greater ecological, biological, and recreational value to the Forest Preserve. Assessment of Lot 8 has not located any critical wildlife pathways, or unique biological or hydrological features. However, this discussion/analysis is premature and beyond the scope of the Jay Mountain Wilderness UMP amendment and TRP for mineral exploration.