

SITE MANAGEMENT PLAN
APN#108-026-006-000



Introduction:

In 2017, Pacific Watersheds Associates was employed to help bring the parcel into compliance with the General Order. A site visit by PWA was made in March, 2017. The landowner and two PWA staff hiked the entire parcel, discussed issues, BPTC Measures, and took photos. PWA helped the landowner enroll with WDID, WRPP, and Water Rights.

This Site Management Plan incorporates findings and solutions of the WRPP and Best Practices as a basis for bringing the parcel into compliance with the General Order. The 12 Standard Conditions and sub-requirements established by the NCRWQCB to protect water quality have been used to identify issues and areas needing attention. Many of the descriptions, observations and recommendations made by PWA during the site visit of March, 2017 have been implemented and continue to be monitored. If a condition has not been met, then a schedule for completion has been created.

The Site Management Plan below, besides the comments of PWA, includes commentary of the landowner where appropriate. As of November 15th, 2018, the site has just completed the scheduled Winterization,

1. Sediment Discharge BPTC Measures

1.1. Site Characteristics

1.1.1. Map of access roads, streams, roads crossing stream, cultivation areas, disturbed areas, buildings, and other relevant site features.

See attachments 1a. Property Diagram

1b. Premises Diagram

1c. PWA Site Map

1.1.2 Describe the access road conditions including estimating vehicle traffic, road surface

(e.g., paved, rocked, or bare ground), and maintenance activities. Describe how storm water is drained from the access road (e.g., crowned, out slope, armored ditch, culverts, rolling dips, etc.).

Roads shall be maintained as appropriate (with adequate surfacing and drainage features) to avoid developing surface ruts, gullies, or surface erosion that results in sediment delivery to surface waters

PWA.

Observations/Comments: Approximately 1.44 miles of road were assessed on the Project Site as part of PWA's site inspection. The total road surface inventoried consisted of a driveway comprised of native material with some rock surfacing, an access road which apart from leading to the fire suppression tank farm, provides access

to the cultivation areas (CA) on the Project Site. Finally, two legacy skid roads and a legacy ridgetop access road were inventoried. The legacy roads on the Project Site are remnants of past logging activities which occurred on the Project Site. The legacy skid roads and ridgetop access road appeared to have been treated for decommissioning in the past, with large, potentially non-drivable water bars installed in some sections. Cutbank ravel and natural hillslope processes have also begun to lay back cutslopes toward natural grade. These legacy roads only provide walking access at this point, and are not being used as part of any operations on the Project Site.

Four road surface discharge points (RSDPs) were identified on the Project Site. None of the four identified RSDPs showed evidence of sediment delivery to surface waters; however all points should be monitored as the potential for transport and delivery exists.

RSDP #1 (Figure 2b) was noted along the driveway just before arriving at the house, as small amounts of diverted streamflow from Stream Crossing #7 (SC #7) divert along wheel ruts, and continue down the road for approximately 50-feet before exiting the road. Minor upslope spring flow from the cutbank of the driveway contributes to RSDP #1 as well. No sediment delivery was noted at or from RSDP #1.

RSDP #2 is an erosional feature originating from runoff generated on the upslope Legacy Ridgetop Road. Directly above CA #2, concentrated water flow exits the legacy logging road network and flows down to the graded pad of CA #2. This road surface runoff has created rilling and minor gulying along the hillside. No sediment delivery to surface waters was noted. As the installed waterbars and outlets appeared to be functioning adequately, no other RSDPs were noted along the legacy logging roads. RSDP #3 was noted along the driveway access road, and is located off-property. At this point, the road surface runoff exits the road network past some legacy waste along a small gully off the outboard fill (OBF). No sediment delivery was observed at this location.

RSDP #4 was noted along the main access road west of the house, where road surface runoff exits the road network along a small gully off the outboard fill (OBF). No sediment delivery was observed at this location.

In general, the driveway lacked sufficient drainage structures to adequately disperse road surface runoff; however each RSDP was investigated there was no identifiable delivery of sediment to surface waters. Minor road surface erosion was noted, minor rilling along paths typically traversed by vehicles has resulted in small wheel ruts. These small issues could be easily mitigated with permanent road shaping treatments, including rolling dips and ditch relief culverts. Additionally, waterbars can be installed at 50-foot increments to direct sheet flow off of the seasonal road network, however unlike rolling dips or ditch relief culverts, these must be regularly maintained.

Corrective or remedial actions needed: Monitor all RSDPs during and following wet weather events. This will allow you to further refine any corrective action needed to ensure that sediment delivery to surface waters is avoided. The steep topography of the Project Site will affect the available options for draining the road network, however options such as "Type 3" rolling dips, which aggressively outslope the road, will effectively disperse road runoff and break up hydrologic connectivity.

Treat RSDP #1 by upgrading stream crossing near house to a 24" diameter culvert, thereby eliminating diversion potential. Alternatively, a culverted crossing with a critical dip could be constructed to prevent stream diversion.

Treat RSDP #2 with the installation of one (or more) waterbar(s) along the legacy ridgetop road in that vicinity. These waterbars should be installed in 50-foot increments

upslope of the discharge point. The waterbar(s) should be installed such that sheet flow along the road is dispersed and diverted onto the hillslope below.

Treat RSDP #3 by installing a Type 1 rolling dip at the proposed location along the driveway (see Figure 2b). Alternatively, water bars could be installed every 50 to 100 feet along the road provided they are maintained annually.

Treat RSDP #4 by installing a Type 3 rolling dip to reduce hydrologic connectivity and mitigate possible sediment delivery at the proposed location along the access road.

Alternatively, water bars could be installed every 50 to 100 feet provided they are maintained annually. See Figure 2b for proposed locations of road drainage features.

Seed and mulch any bare soil or disturbed areas to mitigate and minimize erosion and prevent sediment delivery.

Ditch relief drains, rolling dip outlets, and road pad or terrace surfaces shall be maintained to promote infiltration/dispersal of outflows and have no apparent erosion or evidence of soil transport to receiving waters.

PWA:

Observations/Comments: The only open and active road on the Project Site (“Driveway off Kings Peak”) lacks permanent drainage features. Although some stream flow from stream crossing near house was diverted down the road and off the fillslope at RDSP #1, no sediment delivery was noted from erosion at this location.

Corrective or remedial actions needed: RSDP #1 will be disconnected with the installation of a permanent stream crossing structure at stream crossing near house. Continue to monitor all roads and identified erosion points (RSDPs) to ensure that excessive erosion and sediment delivery to surface waters is not occurring. If delivery of sediment to surface waters occurs, contact PWA, and implement BMPs accordingly.

Landowner Comments:

Access to the site is from King Peak Road, a county unpaved road. Roads on the site are unpaved. Stormwater is drained off roads by diversion ditches at about 50 foot intervals where needed. Some sections of the roads are outsloped. No inside ditches exist. Vehicle traffic is mostly on the driveway between the county road and residence and limited to one or two vehicles. During the growing season, materials and supplies are sometimes moved between the residence and cultivation areas by vehicle. Daily access of cultivation areas from residence is done on foot. During rain season, vehicles do not move on road beyond residence.

Maintenance of roads. As part of winterization program, ditches are cleaned in the fall. Ditches are inspected during and after significant rain events (3” or more) to insure they are functioning properly.

Monitoring water quality of storm runoff with the intent to retard and disconnect movement, reduce sediment carrying capacity, prevent sediment from reaching watercourses and improve infiltration.

Monitor and prevent formation of ruts.

1.1.3. An intermittent stream crosses the driveway before the residence. It has a small flow during the rain season and PWA has recommended the installation of a 24" culvert, scheduled to be completed by October 2020,

PWA has identified the following legacy issues in the WRPP:

Seven stream crossings were identified as part of the property wide site inspection conducted by PWA. All crossings on the project site were unculverted fill crossings which lacked formal drainage structures. SC #1 – SC #6 are shown on Figure 2a, in the western part of the parcel.

SC #1 consisted of a small Class III stream channel which appears to have been filled and/or diverted from its native channel when a graded pad was cut into the hillside (Figure 2a). The pad was built to support six (6) fire suppression water tanks. The small watercourse turns along the inboard section of the pad, which has been heavily rock armored, and flows into an adjacent Class II watercourse. Observations suggested that sediment delivery is not currently occurring at this location.

SC #2 consists of a Class II watercourse which crosses a legacy logging road. The logging road has been laid back through natural hillslope erosion processes, to near natural grade. Minimal future erosion is expected at this legacy crossing site.

SC #3 consists of a small Class III watercourse crossing a legacy logging road. Natural hillslope processes have reduced the road's footprint. Minimal road fill exists in the channel at this point. No hydrologic connectivity of the existing naturally degraded road was noted. Minor amounts of fill remain in the outboard section of the road bench, however much of the channel has worn down to bedrock. A large rock seated at the OBF section of the remaining road fill bifurcates flow, and appears to be acting as a grade control structure. Potential future erosion at this site is estimated to be approximately 2 yds³.

SC #4 consists of a small Class III watercourse crossed by a legacy logging road. No hydrologic connectivity of the existing naturally outsloped road was noted. Minor amounts of fill remain in the outboard section of the road bench, however much of the channel has worn down to bedrock, specifically along the OBF section of the fill. Large roots combined with the rocky composition of the fill material indicate that future erosion will be extremely limited, and should act as a grade control structure to prevent head cut migration from occurring.

SC #5 consists of a small Class III watercourse crossed by a legacy logging road. No hydrologic connectivity of the existing naturally outsloped road was noted. Minor amounts of fill remain in the inboard section of the road bench, however much of the channel has worn down to bedrock, specifically along the OBF section of the fill. The OBF section of the road bench has been laid back to natural channel grade, with no over-steepened bank sections observed throughout the entire crossing.

SC #6 consists of a Class III watercourse which has been crossed by a legacy logging road. This watercourse has incised through the existing road bed, resulting in a boxshaped, gullied channel with over-steepened banks of fill on either side. The large cobble, gravel and rock fill material and small watercourse suggest slow and minimal future erosion and sediment delivery downstream. Future erosion volumes were estimated in the field at approximately 5 yds³ for the left bank, and 3.3 yds³ for the right bank, for a total future erosion volume of 8.3 yds³. There is no threat of stream

diversion. Hillslope processes (ravel) have naturally outsloped the legacy logging road such that no hydrologic connectivity of the existing road was noted.

Finally, **SC #7** (Figure 2b) is an unculverted fill crossing of a Class III watercourse on the main driveway access road to the Project Site. The watercourse crosses the driveway through a small dip in the road bed before discharging over the fillslope. The crossing exhibited a diversion potential to the left during high flow and/or wet weather events. The rocky composition of the fill material contributes to low erosion rates and past sediment delivery at this location.

Corrective or remedial actions needed:

SC#1: The Class III watercourse channel that was filled by original construction of the legacy logging road landing, and then regraded to hold the water tanks, will need to be excavated and restored to its original orientation, longitudinal profile, and cross-section. The remaining landing will need to be regraded, seeded and mulched for erosion control, and then planted with riparian species.

SC #2: This legacy stream crossing of the Class II watercourse has eroded over time and is now largely stable. No hydrologic connectivity of the existing naturally degraded road was noted. No potential future erosion is expected at this site. No treatment or remediation is recommended at this site to protect water quality.

SC #3: Due to its remote location and minimal future erosion (2 yds³), no treatment or remediation is recommended at this site.

SC #4: This legacy stream crossing has eroded and stabilized over time to a broad and gentle dip. Hillslope processes have naturally decommissioned (outsloped) the legacy logging road. Estimations of fill material remaining within erodible reach of the watercourse are approximated at 2 yds³. No treatment or remediation is recommended at this site.

SC #5: This legacy stream crossing has eroded and stabilized over time to a broad and gentle dip. Estimations of fill material remaining within erodible reach of the watercourse are approximated at 2 yds³. No treatment or remediation is recommended at this site to protect water quality.

SC #6: A fill crossing on a long abandoned legacy logging road has gullied through the existing road bench at SC #6. Most of the fill has been eroded and future erosion (8 yds³) will be slow due to the rocky fill material. The site does not represent a significant threat to water quality. Due to the disturbance associated with bringing heavy equipment through the naturally decommissioned road network, remediation or work associated with heavy equipment is not recommended at this site. Any bare soils should be seeded and mulched.

SC #7: A small Class III watercourse crosses the active driveway access road to the Project Site, just north the house. PWA recommends the construction of an armored fill or installation of a 24"x 50' culvert placed at the base of the fill, to minimize sediment delivery to surface waters. See attached PWA design typical drawings.

1.2. Sediment Erosion Prevention and Sediment Capture (Moderate risk Tier 1 or Tier 2 Dischargers are required to submit a Site Erosion and Sediment Control Plan. Those Dischargers may refer to that plan rather than repeat it here).

1.2.1. Erosion Prevention BPTC Measures

1.2.1.1. Describe the BPTC measures that have been, or will be implemented to

prevent or limit erosion. Provide an implementation schedule for BPTC

Minimize soil disturbance

keep heavy equipment off soils where possible

design for dispersed runoff

Limit footprint

vegetate bare soils

keep extra bales of straw handy

PWA Observations:

Around the southeastern portion of the pad for CA #2, PWA staff identified a slump. Erosion control measures had been put in place at the time of PWA's site inspection, including straw wattles and significant straw mulching. The pad for cultivation area # 2 directs runoff to a point along the south side of the pad fillslope and had begun to erode and form a gully. This gully had been treated using straw wattles, heavy straw mulch, and large riprap rock armor..

.Along the north side of CA #2, a small gully had formed from runoff draining off of the north side of the pad. Straw bales had been emplaced in the gully, but had not yet been spread as of the time of PWA's site inspection. No threat of sediment delivery to surface waters was noted at this location. The landowner stated that similar BMPs were slated to be implemented in the immediate future. These and other erosion control measures had been implemented through an erosion control specialist, hired by the property owner, to address the site specific erosion. Significant erosion control measures were in place at the time of PWA's site inspection, and appeared to be functioning adequately.

Corrective or remedial actions needed: Excavate the slumped outside section of the CA #2 graded pad with a hydraulic excavator or backhoe and implement erosion control measures including seeding and mulching on the remaining bare soil areas. Place the excavated spoils in a low gradient area where they will not erode and enter surface waters. Seed and mulch the spoils.. Monitor during and following wet weather events to ensure that erosion control treatment are working, erosion is controlled, and sediment is not delivered to surface waters.

Landowner comments: Monitoring of CA#2 continues. Use of wattles, straw, and seeding each year as part of winterization schedule. Measures appear to be working. Use of terraces where appropriate to control soil erosion and runoff. Removal of slumping fill on pad was successful in preventing further slumping. Excavated soil was placed on top of low gradient pad area.

Standard Condition #3. Riparian and Wetland Protection and Management

a) For Tier 1 Dischargers, cultivation areas or associated facilities shall not be located within 200 feet of surface waters. While 200 foot buffers are preferred for Tier 2 sites, at a minimum, cultivation areas and associated facilities shall not be located or occur within 100 feet of any Class 1 or 2 watercourse or within 50 feet of any Class 3 water course or wetlands

*A fully contained greenhouse nursery built on a slab foundation (MP #10) is the only associated facility located within the buffer zone of any watercourse. PWA staff measured the distance from the nearest edge of the structure to the banks of the active channel of the adjacent Class II watercourse, and found it to be 85-feet. The nursery greenhouse did not appear to exhibit a threat to water quality, but should be monitored to ensure that effluent or runoff from any agricultural activities does not enter the adjacent Class II watercourse. *Because of the concrete foundation, you should seek and request a variance from the North Coast Regional Water Quality Control Board (NCRWQCB) for the nursery adjacent to the house. Note that variance requests may not be accepted for review, or granted. If it is not granted, that portion of the nursery that is within 100 feet of the Class II watercourse will have to be decommissioned and removed.**

The "filled" Class III watercourse at SC #1 should be exhumed (excavated) and

restored to its historic location straight across the graded pad. The restored stream channel profile should match the original channel grade and be constructed with stable 2:1 (50%) sideslopes and a 3 foot wide channel bed. Upon completion, all bare soils (except the channel bottom) should be seeded, mulched and planted with riparian species.

Any unstable or potentially unstable fill materials on the graded pad/landing outside of the restored stream channel should be reshaped and re-sloped to a stable angle (50% or the original hillslope angle). All bare soils should be seeded and mulched. Any bare soils within the riparian buffer of the Class III or Class II watercourses should also be planted with riparian species.

Landowner Comment: The above reshaping of the Class III watercourse to its' original condition is scheduled to be completed before October, 2020.

Standard Condition #4. Spoils Management

Spoils shall not be stored or placed in or where they can enter any surface water
Spoils Management;

Remove the slash and place in a location that poses no threat of delivery to surface waters. Soil which has been discarded or left over should be tarped, cover cropped or picked up and removed to a stable, covered location that poses no threat of delivery or leaching residual nutrients. If spent soil is not going to be reused, it should be disposed of at a licensed soil receiving facility. Storing new soils under cover and on an impermeable floor will prevent any nutrient runoff or leaching to groundwater. Ensure that all future soils are covered from the elements during the winter and sited such that there is no danger of residual nutrients or fertilizer leaching into the groundwater. Scheduled completion before onset of rain season.

1.2.1.1.1.

The description shall address physical BPTC measures, (e.g., placement of straw mulch, plastic covers, slope stabilization, soil binders, culvert outfall armoring, etc.) and biological BPTC measures (vegetation preservation/replacement, hydro seeding, etc.)

- a. Minimize soil disturbances and bare earth areas within these cultivation areas; seed and mulch all bare earth prior to October 31 each year.. Straw should be applied so as soil is not visible. Rice straw will prevent weeds from establishing. Straw can be secured using hand tools or jute netting.
- b. Maintain native grassy buffers and/or dense riparian vegetation between these cultivation areas and the potential receiving waterbody. *Buffers shall be maintained at natural slope with native vegetation. All bare soils should be seeded and mulched.* Any bare soils within the riparian buffer of the Class III or Class II watercourses should also be planted with riparian species. *The Handbook for Ranch and Rural Roads has charts for selecting appropriate species.*
- c. Prior to October 31, planting beds and planting pots containing spent soils or amendments should be either 1) fully tarped or 2) planted with heavy cover crops during the wet season to minimize surface runoff and leaching of nutrients. If cover crops cannot be maintained due to cold weather, the beds/pots should be fully tarped.
- d. All cultivation waste and spent soils should be removed and stored outside the buffer areas during the winter period as per recommendations included elsewhere in this WRPP.

e. Use mulch, straw, and wattles to reduce velocity of runoff and channeling, increase infiltration. Cover and Berm all loose stockpiled construction materials not scheduled for use in the next 48 hours.

apply linear sediment controls (e.g., silt fences, wattles, etc.) along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow length at the frequency specified below.

Slope (percent)	Sheet Flow Length Not to Exceed (feet)
0 – 25	20
25 – 50	15
>50	10

f. No culverted stream crossings exist on the Project Site.

g. No vehicle traffic will occur during the rain season on access roads above the residence when more than .25 inches of precipitation has occurred in the last 24 hours, or ruts and tire tracks can be seen on the roads from vehicles travelling on it.

h. no heavy equipment operation will occur during the rain season.

i Regularly monitor the subject garden area and related facilities to assure the interim measures are effective and adaptively manage the area to minimize or eliminate surface runoff and potential impacts to water quality.

1.2.2. Sediment Control BPTC Measures

1.2.2.1. Describe the BPTC measures that have been, or will be implemented to capture sediment that has been eroded. Provide an implementation schedule for BPTC measures that have not yet been implemented. Identify the sediment control BPTC measures on a site map.

1.2.2.1.1. The description shall address physical BPTC measures, (e.g., placement of silt fences, fiber rolls, or settling ponds/areas, etc.) and biological BPTC measures (vegetated outfalls, hydro seeding, etc.).

Many of the BPTC Measures that are used for preventing or controlling erosion also serve to capture sediment.

a. Spreading mulch, straw, wattles, and seeding have been used on the site to prevent erosion and capture sediment. The landowner will continue to use these methods in the future.

b. Buffer zones in riparian areas next to watercourses are heavily vegetated with natural species with close to 100% canopy coverage and is multi-storied.

c. Loose soil is collected and covered or bagged. Bare soils are seeded or cover cropped, mulched, or covered with plastic.

d. Sediment control areas are monitored and soil cleared to ensure capacity is not exceeded.

1.2.3. Maintenance Activities - Erosion Prevention and Sediment Control

1.2.3.1. Describe how the erosion prevention and sediment control BPTC measures will be monitored and maintained to protect water quality.

Monitoring and maintenance of erosion prevention and sediment capture/control BPTC Measures will be done prior to the rain season, during scheduled winterization period, during and after significant rain events (3" or greater). Verification of the effectiveness of control measures shall be done before the end of the winterization period..

Monitoring of water quality is focused on amount and source of sediment being transported, velocity and quantity of runoff. Effectiveness of control measures are evaluated and if deficient, then appropriate steps taken to either fix the problem or try alternative solutions.

Monitoring points where problems have historically occurred or are occurring. Monitoring points are photographed and recorded in the WRPP. Water quality measurements are to be maintained for at least 5 years.

Road maintenance shall be evaluated annually and performed as needed, during winterization, during and after significant rain events.

1.2.3.2. Describe how any captured sediment will be either stabilized in place, excavated and stabilized on-site, or removed from the site.

Captured sediment can be stabilized through compaction and revegetation. Sediment should not be allowed to enter watercourses. Where necessary, sediment can be excavated and removed to a low grade area, above high water mark, outside 100 year flood zone, and more than 200 feet from watercourses. Avoid putting on steep slopes and/or eroding slopes. Surround spoil piles with straw wattles, earthen berms, or coir rolls to protect from runoff. Keep spoil piles free of woody debris and do not place on top brush, logs, or trees. Keep roots and stumps out of spoil piles.

1.2.4. Erosion control BPTC measures: Describe the interim soil stabilization, if applicable and long-term BPTC measures implemented to prevent sediment transport at each identified disturbed area(s) and improperly constructed features.

Cultivation Area #1 – use of straw, wattles, and seeding implemented. Mulching of beds done during winterization.

Cultivation Area #2 – use of straw, wattles, and seeding implemented. Mulching and covering of beds during winterization, Excavation and terracing done to prevent slumping of fillslope.

Stream Crossing near residence is scheduled for installation of culvert by October, 2020. Removal of slash done and ditching.

Stream Crossing #1 is scheduled to be returned to original condition by October, 2020.

2. Fertilizer, Pesticide, Herbicide, and Rodenticide BPTC Measures

2.1. Provide a summary table that identifies the products used at the site, when they are delivered to the site, how they are stored, and used at the site. If products are not consumed during the growing season, describe how they are removed from the site or stored to prevent discharge over the winter season.

See Table 1 attachment

No Herbicide or Rodenticide is used on-site. Biological pest controls and organic fertilizers are used. Petroleum-based products are avoided.

Products are delivered to site during growing season and stored in the Agricultural Shed at CA#2.

Products are used as directed on the label.

Toxic materials are stored in their original containers with label intact and in a locked, leak proof storage container and located where there is no threat of discharge to waterways, no threat of damage to animals, and with secondary containment in the event of a spill.

When in use, bags and containers are kept close and in a location to prevent accidental spills or damage by wildlife.

After use, bags and containers are returned to storage immediately.

Proper storage instructions are posted.

Spills are cleaned up immediately

Products and containers are transported and disposed of at local transfer station in Redway or taken to the Eureka Hazardous Waste facility.

2.2 Provide a site map that locates storage locations.

See attached site map

2.3. Describe how bulk fertilizers and chemical concentrates are stored, mixed, applied, and how empty containers are disposed.

Bulk fertilizers and chemical concentrates are stored in the Ag Chemical storage shed at CA#2.

Shed is secure, ventilated, and in Shade

Chemicals are in secondary containment and/or locked in a cabinet.

They are applied to the growing beds directly, by sprayers or mixed in a mixing tank with water.

Products are applied as directed on the label and proper protective equipment is available and used as specified on the label.

Empty containers are disposed of at the Redway Transfer Station or at the Eureka Hazardous Waste Station.

2.4 Describe procedures for spill prevention and cleanup.

Spills should be cleaned up immediately. Caution should be taken with hazardous materials. PPE should be worn, including suitable gloves, goggles, and suits. Consult labels for warnings and procedures. A spill kit should be kept nearby and PPE. Spills should be bermed and absorbents used on liquids. Solids can sometimes be swept up, or towels used to pick it up Spilled material, when cleaned up should be disposed of at the proper facility. Spills of hazardous material may need to be reported to authorities.

3. Petroleum Product BPTC Measures

3.1. Provide a summary table that identifies the products used at the site, when they are delivered to the site, how they are stored, and used at the site. If products are not consumed during the growing season, describe how they are removed from the site or stored to prevent discharge over the winter season.

See Table 2 attachment

3.2 Provide a site map that locates storage locations.

See attached Site Map.

3.3 Describe how fuels, lubricants, and other petroleum products are stored, mixed, applied, and empty containers are disposed.

Fuels, lubricants, and other petroleum products are stored in covered areas within secondary containment vessels.

Petroleum Products are delivered to site when needed and used to run power equipment generators, and vehicles.

Storage is located more than 100 feet from water sources with no discharge path to water.

Proper storage instructions posted.

Petroleum products should not be stored with chemicals or fertilizers.

Products should be stored in original containers with labels.

Mixed petroleum products should be properly labeled.

Empty containers should be disposed of properly at the Redway Transfer Station or the Eureka Hazardous Waste Facility.

The use or storage of petroleum-powered equipment shall be accomplished in a manner that prevents the potential release of petroleum materials into waters of the state (Fish and Game Code 5650). To accomplish this, the following precautionary measures shall be followed:

- o Schedule excavation and grading activities for dry weather periods.
- o Designate a contained area for equipment storage, short-term maintenance,

and refueling. Ensure it is located at least 50 feet from waterbodies.

- Inspect vehicles for leaks and repair immediately.
- Clean up leaks, drips and other spills immediately to avoid soil or groundwater contamination.
- Conduct major vehicle maintenance and washing offsite (except as necessary to implement BMP 18).
- Ensure that all spent fluids including motor oil, radiator coolant, or other fluids and used vehicle batteries are collected, stored, and recycled as hazardous waste offsite.
- Ensure that all construction debris is taken to appropriate landfills and all sediment disposed of in upland areas or offsite, beyond the 100-year floodplain.
- Use dry cleanup methods (e.g., absorbent materials, cat litter, and/or rags) whenever possible. If necessary for dust control, use only a minimal amount of water.
- Sweep up spilled dry materials immediately.

A spill kit is kept in areas where petroleum products are used. Spills should be cleaned up immediately.

3.4 Describe procedures for spill prevention and cleanup

Fuels, lubricants, and other petroleum products are hazardous and should be handled with care. Secondary containment should be used when handling to prevent spills.

A spill kit should be kept where petroleum products are used.

Spills should be cleaned up immediately and wastes properly disposed of at a hazardous waste facility such as the Eureka Hazardous waste Facility.

4. Trash/Refuse, and Domestic Wastewater BPTC Measures

4.1. Describe the types of trash/refuse that will be generated at the site. Describe how the material is contained and properly disposed of.

Plastic waste is generated on-site and should be recycled when possible or disposed of at the Redway Transfer Station.

Organic waste should be composted when possible at either the compost area at CA#2 or the area at the residence.

Glass and metal can be recycled at the Redway Transfer Station

Trash cans are located at the cultivation area and residence. An enclosed trash station is located at the residence that is secure from animals.

Trips to the Redway Transfer Station occur weekly.

4.1.1. Provide a site map that locates the trash/refuse storage locations.

See attached Site Map.

4.2 Describe the number of employees, visitors, or residents at the site

The site generally has one or two residents/ independent contractors working at any given time. Visitors are rare.

4.2.1. Describe the types of domestic wastewater generated at the site (e.g., household generated wastewater or chemical toilet).

A non-permitted septic system with leachfield has been operating at the residence for the past 18 years. A toilet with mobile containment tank is scheduled to be operational by March, 2019. The containment tank will be transported and emptied at a local waste station as needed. An attempt to permit the septic system will be made.

4.2.2 Describe how the domestic wastewater is disposed.

4.2.2.1. Permitted onsite wastewater treatment system (e.g., septic tank and leach lines). Does not presently exist on-site.

4.2.2.2. Chemical toilets or holding tank. If so, provide the name of the servicing company and the frequency of service. Benbow RV Park. Weekly Servicing

4.2.2.3. Outhouse, pit privy, or similar. Use of this alternative requires approval from the Regional Water Board Executive Officer; include the approval from the Executive Officer and any conditions imposed for use of this alternative.

Not Applicable

4.2.2.3.1. Provide a site map that locates any domestic wastewater treatment, storage, or disposal area.

See attached Site Map.

5. Winterization BPTC Measures

5.1. Describe activities that will be performed to winterize the site and prevent discharges of waste. The description should address all the issues listed above.

Road Maintenance- evaluate road condition, clean out diversion ditches, verify that ditches are performing as intended, fix any additional problems. Close seasonal roads to traffic during wet season

Disturbed areas- spread straw on bare ground, place wattles on top and toe of slopes, cover soil with mulch, cover crops, or plastic, seed.

Cultivation areas-cleanup trash, cover and berm, store pots, soil, and equipment. Make additional trips to recycling center as needed to reduce waste on-site. Cleanup spoils and cover.

Inspect buildings for repairs that may be needed to get through rain season.

5.2. Describe maintenance of all drainage or sediment capture features (e.g., drainage culverts, drainage trenches, settling ponds, etc.) to remove debris, soil blockages, and ensure adequate capacity exists.

Drainage trenches should be deep enough to carry runoff during significant rainfall events. Ditches should be free of loose soil. Diversion ditches on roads should be at 50 foot intervals and at an angle that does not create more velocity than necessary to get the water off the road. Ditches should not deliver sediment to watercourses.

Wattles should be inspected to determine whether they can perform sediment capture as intended. If excavation and removal of previously captured sediment is necessary to allow adequate capacity to perform, then removed sediment should be put on low gradient area and covered or seeded.

No inside ditches or culverts exist on site.

Ditches should be monitored during and after rainfall events to verify performance. Velocity and quantity of runoff should be evaluated. Velocity can be reduced with mulches, straw, or wattles. Spread out, slow down, and disconnect runoff flow where possible

5.3. Describe any revegetation activities that will occur either at the beginning or end of the precipitation season..

Seeding of native grasses is done. No rye grass .Seeding can take place after a few rain events have occurred and more wet weather can reasonably be expected. If possible, seed should be rolled or tamped into the surface sufficiently so roots can adhere and seed will not be washed away by rain. Seed shortly before rain is expected to prevent birds from eating the seed. After seed has sprouted , return and seed areas that may need more seed.

5.4. If any BPTC measure cannot be completed before the onset of winter period, contact the Regional Water Board to establish a compliance schedule.

5.5. For Region 1 Dischargers, describe any activities that will be performed to address legacy waste discharge issues.

. Inspect, monitor, and address any legacy discharge issues

TABLE 1 – PEST CONTROL PRODUCTS USED

PEST MANAGEMENT PLAN

Biological Pest-Management Control Methods

Use of organic bio-based pest management with “exempt from the requirement of food tolerances” by the U.S. Environmental Protection Agency and have broadly defined crop use patterns listed on the DPR approved label that are interpreted as applicable for use on Cannabis.

Grandevo® CG and Regalia® CG have received label approval from the California Department of Pesticide Regulation, clearing the products for use on California Cannabis crops.

Grandevo The active ingredient in Grandevo CG is a new species of bacteria, *Chromobacterium subtsugae*, with both insecticidal and miticidal properties. The end product formulation of Grandevo CG contains no living *Chromobacterium subtsugae* cells and is also quality checked to ensure the product is free of harmful microbial contamination. Upon exposure to plant eating insects and mites, Grandevo CG stops pests from feeding in less than one minute and reduces adult insect and mite reproduction. Cannabis growers are readily adopting Grandevo CG to control bud mites and aphids, while home gardeners and small farmers use Grandevo CG to improve insect and mite control, such as plant-eating aphids, mites, beetles and caterpillars, in their gardens

Regalia CG is formulated with knotweed extract, which stimulates a plant’s own immune system, known as “induced systemic response” activity, to fight diseases while at the same time improving a plant’s growth, flower and fruit quantity, fruit and flower quality and overall crop yields, including Cannabis. In addition to its plant health, quality and yield enhancements, REGALIA CG controls powdery mildew, Botrytis, gray mold and leaf spot in treated plants.

VENERATECG is a biological insecticide containing killed cells of *Burkholderia* spp. strain A396 and spent fermentation media for use on agricultural crops against the pests. VENERATECG controls insect pests by enzymatic degradation of exoskeletal structures and interference with the molting process leading to mortality through contact and/or ingestion. VENERATE CG controls or suppresses many foliar feeding pests including caterpillars and foliage feeding coleopteran and many soft-bodied insects such as, aphids, whiteflies and plant sucking mites infesting labeled crops and plants.

RegaliaCG-A plant extract to boost the plant defense mechanisms against certain fungal and bacterial diseases and to improve overall plant health. • Apply 2-4 tbsp/ gallon every 7-10 days • Use as a dip for transplants and drench the root zone for root strength • Begin 1st spray application at 1st true leaf

GrandevoCG-Start strong to protect your plants from nutrient robbing mites, thrips and aphids that impact yield and overall plant health: • Start EARLY, before infestation occurs • Apply 2-4 tbsp/gallon every 7 -10 days • Multiple modes of action • Alternate with Venerate CG

VenerateCG- Venerate is your go-to in season insecticide with multiple modes of action to beat down pests impacting the health and productivity of plants. • Apply 2-5 tbsp/gallon every 7 days • No limit to number of applications per season • No spray buffer needed • Alternate with Grandevo CG

Chemical Pest-Management Control Methods

Sulfur to be applied for control of mites. Apply powder or spray once a month. Do not apply during flowering

TABLE 2 OF PETROLEUM PRODUCTS USED

DIESEL, GASOLINE, MOTOR OIL, 2 CYCLE OIL ADDITIVE