

October 13, 2009

Chad Hudson  
Marathon Oil Company  
Rockies Gas Team  
743 Horizon Ct., Suite 220  
Grand Junction, CO, 81506

**Re: Review of Marathon Oil Company Application for a Multi-Well Pit on Marathon Pad 596-32C, Southwest ¼ of Section 32, Township 5 South, Range 96 West of the 6<sup>th</sup> Principal Meridian, Garfield County, Colorado**

Dear Mr. Hudson:

The Colorado Oil and Gas Conservation Commission (COGCC) has completed a review of the Marathon Oil Company (Marathon), June 17, 2009, Form 15 application and submittal for a multi-well process water storage Pit on Pad 596-32C, located in the Southwest ¼ of Section 32, Township 5 South, Range 96 West of the 6<sup>th</sup> Principal Meridian, Garfield County, Colorado (the Site/the Facility/the Property).

In general, please generate a table of contents for the application. Please clearly number and title all figures, drawings, and plans, into a common Section reserved for Figures. Please use legible font type, size, color, and weight on these exhibits so that the reader can clearly distinguish features on each exhibit. Please correct discrepancies for common features (e.g., roads) between like figures. Clearly sort all relevant supporting information into clearly titled/labeled separate attachments/appendices.

**Chris:** It was our understanding that you wanted us to treat this application as if it were a Centralized Exploration and Production Waste Management Facility. As you know, Marathon submitted the application as if it were an Earthen Pit Report/Permit. So, we have reviewed and provided comment for Form 15, and what we believe to be relevant COGCC rules for this Facility including 902, 904, 906, 907 and 908. We have highlighted selected responses for your review/input. In some cases, our response was based on my understanding of the issues that you have seen with similar pits (i.e., releases). Therefore, I would recommend that you read all responses in case you believe that I may have overstepped my request for relevant information. Rick

The following outlines issues, in the package submitted, that require revision and/or additional information.

**Form 15, Offsite disposal of Pit contents? NA**

Please indicate how Marathon will manage produced water piped to the Pit if the slick water hydraulic fracturing/reinjection activities are scaled back. Marathon's design of the proposed Pit allows for loading of trucks with produced water after "Gun Barrel" treatment and from the Pit. If the produced water requires injection/disposal please indicate where the water will be disposed.

**Form 15. Is the site in a sensitive area? No.**

Marathon's Site is within the Greater Sage Grouse Production grounds, which are considered a sensitive area, but the proposed Pit is within an existing pad and that pad was approved in July 2008, before the

rules went into effect, so the sensitive area determination is not applicable. The Site is outside of the 300 foot corridor for the nearest streams and no wells or public water supplies are in the area.

**Form 15. Distance (in feet) to nearest groundwater. 319 feet**

Please indicate whether Marathon's estimate of distance to groundwater is a vertical measurement or a horizontal distance to the nearest well/spring. If it is a vertical measurement please provide the detail

**Form 15. Distance (in feet) to nearest water wells. 6,100 feet**

Please indicate the direction from the Pit to the three closest water wells, and the total depth and screened interval of each of the water wells.

**Form 15. Soils.**

Please provide relevant type, thickness and characteristics of soils underlying the Pad.

**Form 15. Pit Design and Construction. Daily Inflow rate: 44 bbl/day annual average.**

On Form 26, Source of Produced Water for Disposal, Marathon has identified eight (8) groups (?) of wells whose produced water will be piped to the Pit. It appears that these eight groups comprise a total of forty-eight (48) wells. Please provide average daily flow rates from each well group to the Pit.

**Form 15. Pit Design and Construction.**

Please provide detailed description of the design and construction details for the proposed Pit including but not limited to:

- the means for cushioning/protecting the 24 mil reinforced polyethylene (RPE) bottom liner from voids/ angular rock/gravel/et al that make up the floor of the Pit
- the manufacturer of the RPE and the method used to weld the sections together
- layout and estimated locations of welds in the 24 mil RPE bottom liner
- the number, location and final design for the leak detection wells to be installed between the upper and lower liners
- the type, model and make of the leak detection sensors to be used inside the leak detection wells
- the type, model and make of the alarm(s) used to alert/relay leak detection results to Marathon
- the type and thickness of material to be used between the lower and upper RPE liners
- the layout and estimated locations of welds in the 36 mil upper liner
- the detail for securing the edges of the liners on the perimeter of the Pit
- the detail demonstrating how piping from the Gun Barrel/Test Tanks enters the Pit
- the detail demonstrating how piping for truck loading (from the Pit) exist the Pit
- the type, height and location of fencing to be used to limit access to the Pit and locations for gates, means for limiting access to the Pit
- the design and location for signage used to notify employees, vendors, contractors et al to limit materials placed in the Pit to produced water
- the means for limiting wildlife access to the Pit from birds

**Form 15 Supplement, Rule 902.b.**

Marathon indicated that the Air Pollution Emission Notice (APEN) issued by the Colorado Department of Public Health and Environment (CDPHE) limits the maximum throughput of produced water to 16,200 bbl/year. We understand that Marathon will design the means for further separation in the produced water so that the CDPHE will allow Marathon to increase the limits of the APEN. Please include documentation of the revised APEN to COGCC.

Marathon has indicated that the calculated Pit volume is 40,607 bbls (maximum). Please explain whether this is the total volume that the Pit can contain, or whether this is the total volume that the Pit can maintain with a 2-foot freeboard. Marathon has indicated that the (eventual) working volume of the Pit will be 32,039 bbls. Please indicate what measures, and or devices will be used, to ensure a minimum 2-foot freeboard once the APEN is revised and the maximum available volume of the Pit may be utilized.

Marathon has indicated plans to complete more than 50 wells in 2010. Please provide COGCC with a mass balance diagram that provides:

- average daily input from the source(s) for all produced water to be routed to the Pit and the average daily flow of produced water from each source (Form 26) piped to the Pit
- average daily output from the Pit of the volume of produced water used to fracture stimulate reservoir rock for each well completion and the method to be used to deliver produced water from the Pit to that well
- average daily input of the volume of produced water recovered from each completed well and the method to be used to return produced water to the Pit
- average daily output of the means for managing produced water that exceeds the allowable limit of the Pit (i.e., with 2-foot freeboard)

**Form 15 Supplement, Rule 902.d.**

Form 15 indicates the Pit will not be netted to prevent migratory bird access. Please provide detailed description for measures to be used to limit access to the Pit from migratory/local birds.

**Form 15 Supplement, Rule 902.i.**

Please indicate what biocide measures will be utilized to control bacteria growth and odors in the Pit.

**Form 15 Supplement, Rule 904.b.(1).**

Please provide details on the manufacturer of the 24-mil and 36-mil RPE liners and specs for puncture and tear strength, adequate elongation, resistance to deterioration by ultra violet light, weathering, hydrocarbons, aqueous acids, alkali, fungi or other substances in the produced water.

**Form 15 Supplement, Rule 904.b.(2 and 3).**

Please provide the Director with the proposed design for the Pit lining system including: materials underlying the lower liner, the leak detection wells and alarm system, and the field seam welds for the 24-mil and 36-mil liners. Please provide detailed as-built drawings to the Director following construction.

**Form 15 Supplement, Rule 904.c.(1).**

Please provide detailed cross-sectional and plan view for method proposed to be used to secure the liners to the perimeter of the Pit.

**Form 15 Supplement, Rule 904.c.(3).**

Please provide detailed information regarding the type and thickness of soil and/or synthetic padding proposed to be used to pad the bottom, sides and edges of the lower liner for the Pit. Please demonstrate to the Director how the padding and/or soil will be used to support the liner, how the soil (if used) will be free of sharp rocks, voids, fissures from compromising the liner. Please provide detailed as-builts to the Director of the final design of the Pit.

**Form 15 Supplement, Rule 906.e.(1).**

Please provide clarification of the following.

- Marathon indicates that a “Gun Barrel” separation above ground storage tank (AST) and Condensate AST will be present on the Site as part of the produced water treatment process prior to storage in the Pit. Please provide specs and design figures for the secondary containment structures, lines, and walls, for the ASTs to demonstrate that the secondary containment meets the requirements of Rule 906.e.(1).
- Marathon indicates that multiple Test ASTs will be used to collect produced water, post Gun Barrel treatment, for analyses before produced water enters the Pit, and that the treated produced water will have total dissolved solids (TDS) in the range of 6,000 to 9,000 milligrams per liter (mg/L). Rule 906.e.(1) requires secondary containment for any AST holding produced water with TDS exceeding 3,500 mg/L. Please provide specs and design figures for a secondary containment structure around the Test ASTs that meets the requirements of Rule 906.e.(1), and indicate the location of the secondary containment structure on the Site layout.

**Form 15 Supplement, Rule 907.a.(3).**

*Marathon intends to reuse the water- do they need to fill out the Sundry Notice Form 4?* Please complete Form 4, Sundry Notice Form for the re-use of produced water.

**Form 15 Supplement, Rule 907.b.(2).**

Please indicate record keeping procedures will be used to track produced water that will be routed off the Site, above and beyond the current limit of 16,200 bbl/year, during and after Phase 1.

**Form 15 Supplement, Rule 907.c.(1).**

Please provide details on the treatment methods proposed to be used on the well pads and on the Site (i.e., three-phase separator and, gun barrel separator) that will be used to process the produced water prior to entering the Pit.

**Form 15 Supplement, Rule 907.c.(3).**

**Chris:** The rule applies to produced water recycling and reuse, and says that the water may be reused “in a manner consistent with ... water quality standards and classifications established by the WQCC for waters of the state”. Does this mean that the produced water has to meet water quality standards before being reused for drilling operations?

***THE FOLLOWING COMMENTS REGARD THE APPLICATION A CENTRALIZED E&P WASTE MANAGEMENT FACILITY.***

**Rule 908.b.(3).**

Please provide a legal description of the site in the text of the supplement.

**Rule 908.b.(4).**

Please provide a general topographic and general geologic description of the site/site vicinity.

**Rule 908.b.(5).A and B.**

Please provide plans, drawings, design, figures and maps in a common Section reserved for figures.

Please clearly title, number, and scale each drawing and include:

- Site Location Map on scale no less than 1:24,000
- Scaled drawings illustrating Facility measured distances (90 degree angle from facility) to closest north or south Section line and east or west Section line. Include a survey containing description of established monuments and collateral evidence of all aliquot corners.
- A Site Plan that illustrates the existing and proposed drainage patterns, the distance to nearby drainages and springs
- Scaled Site Plan for the entire property illustrating general layout for fire lanes, roads, buffer zones, fencing, security gates, netting, buildings, Pit, leak detection wells for the Pit, incoming and outgoing pipelines, Gun Barrel above ground storage tank (AST) and secondary containment facilities, Condensate AST and secondary containment facilities, Test ASTs and secondary containment facilities, truck loading/discharges facilities for Pit and for condensate AST
- Please provide detailed description of the design and construction details for the proposed Pit including but not limited to:
  - the means for protecting the 24 mil reinforced polyethylene (RPE) bottom liner from voids/ angular rock/gravel/et al that make up the floor of the Pit
  - the manufacturer of the RPE and the method used to weld the sections together
  - layout and estimated locations of welds in the 24 mil RPE bottom liner
  - the number, location and final design for the leak detection wells to be installed between the upper and lower liners

- the type, model and make of the leak detection sensors to be used in the leak detection wells
- the type, model and make of the alarm(s) used to alert/relay leak detection results to Marathon
- the type and thickness of material to be used between the lower and upper RPE liners
- the layout and estimated locations of welds in the 36 mil upper liner
- the detail for securing the edges of the liners on the perimeter of the Pit
- the detail demonstrating how piping from the Gun Barrel/Test Tanks enters the Pit
- the detail demonstrating how piping for truck loading (from the Pit) exist the Pit
- the type, height and location of fencing to be used to limit access to the Pit and locations for gates, means for limiting access to the Pit
- the design and location for signage used to notify employees, vendors, contractors et al to limit materials placed in the Pit to produced water
- the means for limiting wildlife access to the Pit from birds
- Please provide detailed description of the design and construction details for the Gun Barrel AST, Condensate AST and Test ASTs and the respective secondary containment facilities.
- Please provide detailed description of the Truck Loading/Unloading Facilities
- Please provide detailed description of the design and construction details for the Pipeline(s) Routing Produced Water In and Out of the Facility.

**Rule 908.b.(5).B.**

Please provide a scaled drawing of the entire section containing the proposed facility. The field measured distances from the nearer north or south and nearer east or west section lines shall be measured at ninety (90) degrees from said section lines to facility boundaries and referenced on the drawing. A survey shall be provided including a complete description of established monuments or collateral evidence found and all aliquot corners. Include these drawings in the Section for Figures.

**Rule 908.b.(5).C.**

Please provide a scaled drawing illustrating the location of site security measures. Indicate how access will be limited during and after business hours. Demonstrate measures to prevent someone from accessing the site by vehicle or entering on foot. Update the drawings to illustrate the location of all fencing. Include these drawings in the Section for Figures.

**Rule 908.b.(5).D.**

Please provide a scaled drawing of the Site illustrating a 10-foot fire lane encompassing the active treatment area, as well as a 10-foot buffer zone within the fire lane. Include these drawings in the Section for Figures.

**Rule 908.b.(5).E.**

Please provide a complete Stormwater Management Plan for the Site. Demonstrate that the current/proposed ditches, catchment basins and berms will accommodate a one hundred (100) year, twenty four (24) hour event. Demonstrate that the facility is designed with a run-on control system that will prevent flow onto the facility during peak discharge. Demonstrate that the facility is designed

with a run-off control system to contain the water volume from a twenty-five (25) year, twenty-four (24) hour storm. Include drawings from the Plan in the Section for Figures.

**Rule 908.b.(6).**

Marathon has indicated plans to complete more than 50 wells in 2010. Please provide COGCC with a mass balance diagram that provides:

- average daily/monthly input for the source(s) for all produced water to be routed to the Pit and the average daily flow of produced water from each source (Form 26) piped to the Pit
- average daily/monthly input for the volume of produced water used to fracture stimulate reservoir rock for each well completion and the method to be used to deliver produced water from the Pit to that well
- average daily/monthly input for the volume of produced water recovered from each completed well and the method to be used to return produced water to the Pit
- average daily/monthly input for the means for managing produced water that exceeds the allowable limit of the Pit (i.e., with 2-foot freeboard)

Please provide a list of all sources (Form 26) of produced water and provide a characteristic waste profile for each source. For example, a composite sample for a group of wells that input produced water into the pipeline at a common location. Please compile the analytical results for the samples into a common table. List sample location/name, sampler, dates sampled, dates analyzed, laboratory sample number, and analytical results for comparison purposes. Include analytical data sheets as an attachment.

**Rule 908.b.(7).A.i through iv.**

Please provide the following:

- details regarding the type and thickness of unconsolidated soils beneath the property on which Marathon proposes to construct the Pit (Site vicinity)
- the type and characteristics of bedrock underlying unconsolidated soils beneath the Site vicinity. Please overlay the surface geology on a map with a scale no less than 1;24,000. Include the drawing in the Section for Figures.
- local and regional geologic structures and any geologic hazards that may affect the design/operation of the Facility. Please illustrate those features, if present, on the geologic map of the Site vicinity. Include the drawing in the Section for Figures.

**Rule 908.b.(7).B.i.**

Please describe and illustrate the location of all surface water features within 2.0 miles of the proposed Site. Please illustrate pre-development surface water drainage patterns from the Site towards nearby surface water features and the flow direction in nearby drainages on a common map. Include the drawing in the Section for Figures.

**Rule 908.b.(7).B.ii.**

Marathon indicated that no “known springs” exit in the vicinity of the Site that would indicate shallow groundwater. However, the four sampling points that were sampled by Buys and Associates in nearby drainages were reported to be springs. Because these four springs are situated topographically and hydraulically downgradient from the Site it is likely that groundwater beneath the Site vicinity contributes to discharge in these springs. Please determine the type and thickness of soil beneath the Site, the depth to the bedrock surface, the type and characteristics of the underlying bedrock, the presence and/or absence of saturated soils, and the depth to shallow groundwater. In addition, please identify and describe the primary “major” aquifers for groundwater wells within the area.

**Rule 908.b.(7).B.iii.**

Please provide the location, total depth, depth to water, yield, screened interval and screened water bearing zone (aquifer) name for all water wells within a 1-mile radius of the Site boundary. Include the drawing in the Section for Figures.

**Rule 908.b.(7).B.iv.**

Please provide the hydrologic properties of the shallow water-bearing soils and groundwater aquifers located beneath the Site vicinity including: the depth to the potentiometric surface, the direction(s) of groundwater flow, and the rate of flow for each water-bearing zone/aquifer.

**Rule 908.b.(7).B.v.**

Please provide a drawing that illustrates the location of the Site in relation to the floodplains for Little Creek and House Log Gulch. Include the drawing in the Section for Figures.

**Rule 908.b.(7).B.vi.**

Please provide analytical results for the baseline water quality conditions for shallow groundwater in the Site vicinity.

**Rule 908.b.(7).B.vii.**

Using the information gathered from groundwater assessment beneath the Site vicinity please demonstrate the potential impacts to groundwater and/or surface water in the Site vicinity from a release(s) from the Pit.

**Rule 908.b.(7).C.i.**

Please provide complete design details and drawings for liners used for the Pit and secondary containment features (for ASTs) that will be used on the Site including:

- the cushioning to be used for protecting the reinforced polyethylene (RPE) bottom liners from voids/ angular rock/gravel/et al that make up the floor of the Pit/secondary containment facilities
- the manufacturer of the RPE, the total square footage of RPE used to construct the Pit/secondary containment facilities and the method used weld the sections together
- layout and estimated locations of welds in the bottom liners

- the number, location and final design for the leak detection wells to be installed between the upper and lower liners
- the type, model and make of the leak detection sensors to be used in the leak detection wells
- the type, model and make of the alarm(s) used to alert/relay leak detection results to Marathon
- the type and thickness of material to be used between the lower and upper RPE liners
- the layout and estimated locations of welds in the upper liners
- the detail for securing the edges of the liners on the perimeter of the Pit/secondary containment facilities

Include the drawings in the Section for Figures.

**Rule 908.b.(7).C.ii.**

Please provide the design details and drawings for the depth of cut for the Pit/secondary containment liners, material underlying the liner, and Pit liner anchor trench around the Pit perimeter. Include the drawings in the Section for Figures.

**Rule 908.b.(7).C.iii.**

Please provide location, dimensions and grade for all existing and proposed surface water diversion structures on the Site. Include the drawing in the Section for Figures.

**Rule 908.b.(7).C.iv.**

Please provide scaled drawings of the location and dimensions for any existing or proposed surface water containment structures. Include the drawing in the Section for Figures.

**Rule 908.b.(7).C.v.**

Please provide scaled drawings of the location and dimensions for all proposed structures and access roads. Include the drawing in the Section for Figures.

**Rule 908.b.(8).A.**

Please include an Operating Plan that describes the function of the Gun Barrel system, the rates of removal of condensate, the Test ASTs, the sampling methods and analyses to be used to demonstrate removal/reduction of condensate from the produced water, the frequency of removal of condensate from the condensate AST, the volume of flow into and out of the Pit from pipelines serving existing wells and recently completed wells, the leak detection monitoring plan and contingency plan for reported detection(s).

**Rule 908.b.(8).B.**

Please include a Dust and Moisture Control Plan for the Site as an appendix to the Operating Plan.

**Rule 908.b.(8).C.**

Provide details for sampling methods/analyses to be used to demonstrate removal/reduction of condensate from the produced water as an appendix to the Operating Plan.

**Rule 908.b.(8).D.**

Please prepare and provide an Inspection Checklist for daily, weekly and monthly monitoring activities to be conducted at the Site. Please provide method for storing/cataloging/ tracking inspection checklists at the Site and the proposed method to prompt maintenance activities. Please provide a schedule and details for the type and frequency of maintenance activities required for the equipment, pipeline, ASTs, Pit liner et al. Include this information as an appendix to the Operating Plan.

**Rule 908.b.(8).E.**

Please provide a plan for emergency response in the Contingency Plan [Rule 908.b.(11)] as an appendix to the Operating Plan.

**Rule 908.b.(8).F.**

Please describe in the Operations Plan how the Site personnel will maintain records for the facility, including inspection sheets, maintenance activity, sampling results, storage volumes, flow rates into and out of the Pit and other details. Discuss method for storing/cataloging/ tracking this information. Include this discussion as an appendix to the Operating Plan.

**Rule 908.b.(8).G.**

Please describe measures and provide drawings of facilities to be used for Site security by personnel, for vehicular traffic and to control/limit access by wildlife. Include this information as an appendix to the Operating Plan.

**Rule 908.b.(8).H.**

Please indicate the operating hours for the Facility and the hours that personnel will be present on the Site. Please demonstrate the means for relaying positive leak detection results to Marathon personnel during non-operating hours and/or when personnel are away from the Site.

**Rule 908.b.(8).I.**

Please indicate what measures will be taken to mitigate noise and odor from the facility, or explain why no measures are necessary.

**Rule 908.b.(8).J.**

Please describe the type and volume of any wastes/condensate or other that will be generated by the Facility and provide a plan for the final disposition of these wastes/products. Provide analytical methodologies and/or profiling techniques to be used to demonstrate that the wastes are acceptable for a landfill or other.

**Rule 908.b.(9).A.**

Please provide a scaled figure (1:24,000) that denotes a 1-mile radius around the Site. Please present the location(s) of the Pit and any water wells within that area as identified by the State Engineer Office. Please sample any wells within a 1-mile radius for the analytes listed under Rule 908.b.(9).A. Please

provide the water quality data from these analyses to the Director in an electronic data deliverable format within three months of collection of the samples. If access to a well is denied, please provide documentation name, address, e-mail address and telephone numbers of the owner/lessee of the well, to show a good-faith effort was made to gain access to the well.

**Rule 908.b.(9).B.i., ii.**

The Director understands that Marathon has elected to install dual liners with a leak detection system at the Site. Please describe the plans for monitoring the leak detection system as an appendix to the Operating Plan. Finally, please provide proposed monitoring well locations for wells to be installed on the property to monitor the Pit in the event that the leak detection system identifies a failure of the upper RPE liner.

**Rule 908.b.(10).**

Please provide a Surface Water Monitoring Plan to be used once the Site Pit is operational. The Plan should present frequency of sampling events and analyses to be used to for the sampling locations used for baseline analyses collected in September 2008 (Buys and Associates, 2008). Please compile the analytical results for the samples into a common table. List sample location/name, sampler, dates sampled, dates analyzed, laboratory sample number, and analytical results for comparison purposes. Include analytical data sheets as an attachment and copy the Director on future results from all compliance surface water monitoring events.

**Rule 908.b.(11).**

Please provide a Contingency Plan as an appendix to the Operating Plan that addresses the following elements:

- Emergency response and 24-hour contact information for key personnel/authorities, emergency personnel and pertinent agencies
- Provide a flowchart illustrating/outlining responsibilities under a joint operating agreement for maintenance, closure, and monitoring at the facility
- Please include a list of types, volumes, locations and emergency response actions for any specific chemicals to be stored at the Site in the Contingency Plan.
- The Contingency Plan should include evacuation routes or meeting locations to ensure all staff have evacuated the facility.
- The Contingency Plan should include specific response activities to address positive detects in leak detection wells, management of Produced Water (at level near Pit limits) and condensate which will be stored at the facility.

**Rule 908.d.**

Please provide a detailed site-specific cost estimate for reclamation of the Site upon closure. Include this information within the Preliminary Closure Plan and attach to the Operating Plan as an appendix. The cost estimate shall include costs associated with worst case scenarios including spills/release(s)

from the facilities, managing release(s) to shallow groundwater/surface water, and managing impacted soils.

**Rule 908.e.**

Prepare and provide a Facility Modification Checklist (FMC) as an appendix to the Operating Plan to be used by Marathon personnel as a cue to forward information regarding facility modifications, updates to the Operating Plan, Permit Compliance and Conditions Information (e.g., changes to the APEN with CDPHE) to the Director for approval. Please forward completed FMC, even if no changes have occurred, to the Director **on an annual basis (Chris what do you think)?**

**Rule 908.f.**

Prepare and include a template/outline for an Annual Report as an appendix to the Operating Plan to be used to summarize operations, volume of produced water treated, volume of condensate generated from Gun Barrel separation activities, volume of produced water re-used for hydraulic fracturing activities, volume of produced water transported for off-site disposal, and waste disposed, results from leak detection monitoring, and results from surface water monitoring activities. Prepare and include a preliminary 5-year schedule for submittal of annual reports to the Director.

**Rule 908.g.(1).**

Please provide a site-specific Preliminary Closure Plan that addresses the following:

- Prepare Form, Inserted as Page 1 of the Preliminary Closure Plan, to prompt Marathon Personnel to Submit a Detailed Site Investigation and Remediation Work Plan (Form 27) to the Director for approval Sixty (60) Days Prior to Closure
- Decommissioning and removal of all equipment.  
Final disposal of treated or residual waste.
- Closure and reclamation of the storage Pit.
- Strategy for sampling/analyses to verify compliance with soil and groundwater standards.
- Post-closure monitoring requirements.
- Details for the reclamation of the site.
- Detailed cost estimate for carrying out the Closure Plan (assume worst case scenarios)

Include this Preliminary Closure Plan as an appendix to the Operating Plan.

**Rule 908.h.**

Please provide copies of any approval notices, permits, or other similar types of notifications that have been issued to the facility from local governments or other agencies regarding the construction or zoning of the facility to the Director for review prior to issuance of the operating permit. This includes the APEN submitted to CDPHE.

Once these issues have been addressed please re-submit the entire package for final review/approval. In the interim, if you have any questions or concerns please feel free to contact me at (970) 285-0232.

Sincerely

Christopher Canfield