



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
700 Heinz Avenue
Berkeley, California 94710-2721



Edmund G. Brown Jr.
Governor

August 2, 2016

U.S. Certified Mail No.: 7012 0470 0000 6670 1872
Return Receipt Requested

Mr. Ani Samuelian
Vice President
Atlas Precious Metals Inc
640 South Hill Street Suite 743
Los Angeles California 90014

NOTICE OF DEFICIENCY FOR THE PERMIT RENEWAL APPLICATION FOR THE
ATLAS PRECIOUS METALS, INC., 640 SOUTH HILL STREET, SUITE 743, LOS
ANGELES CALIFORNIA, EPA ID: CAL000098454

Dear Mr. Samuelian:

The Department of Toxic Substances Control (DTSC) has completed its technical review of the Standardized Permit Renewal Application (Application) received January 29, 2016 for the Atlas Precious Metals, Inc. (Atlas) facility located at 640 South Hill Street, Suite 743, Los Angeles, California.

The Permit Renewal Application has been reviewed for compliance with the applicable California Code of Regulations, title 22 and the Health and Safety Code, division 20 requirements. DTSC has determined that the Revised Permit Renewal Application is deficient. The enclosed comments comprise the Notice of Deficiency. If Atlas would like a meeting to discuss the comments, please contact me to schedule the meeting.

The following must be submitted by September 17, 2016:

- 1) **Written responses to each of the deficiencies identified.** In responding to each of the deficiencies, restate the deficiency and identify the page number in the revised permit renewal application where the deficiency has been addressed.
- 2) **A redlined/strikeout version of the revised permit renewal application showing the changes that have been made to the November 10, 2016 Revised Permit Renewal Application.**

Ani Samuelian
August 2, 2016
Page 2

- 3) **Two hardcopies and one electronic copy (CD or flash drive) of the complete revised permit renewal application.** The revised permit application must be a complete application with all sections, figures, table, appendices, calculations, and attachments and all information required by the California Code of Regulations, title 22 and the Health and Safety Code, division 20 (emphasis added). That is, the revised permit renewal application must be a standalone document with all corrected deficiencies incorporated.

Please note that pursuant to Health and Safety Code section 25200.8 and California Code of Regulations, title 22, section 66271.2(e), DTSC may deny permit applications based on a failure of the applicant to respond to a notice of deficiency or the applicant responds with substantially incomplete or substantially unsatisfactory information.

If you have any questions, please contact me at (510) 540-3957 or by email at joanna.louie@dtsc.ca.gov.

Sincerely,

//Original Signed By//

Joanna Louie
Hazardous Substances Engineer
Permitting Division
Department of Toxic Substances Control

Enclosure

cc: Brooke O. Selzer
Attorney
Office of Legal Affairs
Department of Toxic Substances Control

**FIRST NOTICE OF DEFICIENCY FOR
ATLAS PRECIOUS METALS, INC.
EPA ID NO. CAL 000098454**

The results of DTSC's technical review for the Atlas Precious Metals, Inc., Facility are presented below. The technical review is formatted to correspond with the sections presented in Atlas' permit application. For each deficiency, the following are provided: (1) the requirement (i.e. relevant statute and/or regulation, where applicable), which provides the basis for the deficiency; (2) the part/section/page in which the deficiency is found in the application; (3) DTSC's finding; and (4) instructions for remedying the deficiency.

Comments

1. **Section 2, Facility Operation and Hazardous Waste Management:** Pursuant to title 22 CCR Section 66270.14(b) (8) (E), the operation plan must include a description of procedures, structures or equipment used at the facility to prevent undue exposure of personnel to hazardous waste (for example, protective clothing). The Application must be revised to describe the procedure and or equipment used to prevent exposure of personnel to hazardous waste.
2. **Section 2, Facility Operation and Hazardous Waste Management, Step 1, Page 3:** A facility must provide a complete description of their manufacturing process. Atlas states that materials are received by "one of the following three methods." Only 2 methods are listed. The Application must be revised to describe the third method or change the wording to state that Atlas receives waste by "one the following two methods."
3. **Section 2, Facility Operation and Hazardous Waste Management, Step 1, Page 3:** Transportation of under 50 pounds of material may be transferred without a manifest but Atlas must use a bill of lading. The Application must be revised to state that they will use a bill of lading for waste that doesn't require a manifest.
4. **Section 2, Facility Operation and Hazardous Waste Management, Table 1, Equipment Identification Summary, Page 4:** In Table 1, Atlas states the capacities for treatment units. The capacities for all the units are stated in pounds per month. If the treatment unit is a batch process, then the capacity must state the maximum amount of hazardous waste that can be treated at any one time. Table 1 must be revised to indicate the capacity for each unit as maximum capacity at any one time.
5. **Section 2, Facility Operation and Hazardous Waste Management, Table 2, Storage Area Summary Page 5:** In Table 2, Atlas states the capacities for their storage areas. The capacities are stated in pounds per month. The capacity of

each storage unit should be stated as the maximum amount of hazardous waste that a storage unit can hold at any one time. Table 2 must be revised to indicate the maximum capacity of each storage area at any one time. Also, Table 2 lists the number of containers but it is not clear if this is the maximum number of containers regardless of container size. For example, Table 2 states that 6 containers can be stored in the shipping area but lists two sizes (e.g., 30 and/or 55 gallon containers). The Application must be revised to clarify the meaning of "number of containers" listed in Table 2.

6. **Section 3 Waste Analysis Plan, part 3.2.4 Frequency of Analysis, Page 7:** A Waste Analysis Plan must describe the waste streams and sampling procedures. Part 3.2.4 states that "Representative samples will be collected and analyzed for total metals on an annual basis (i.e., each calendar year) to confirm that the analysis is accurate and up to date." The section doesn't state how many representative samples will be taken each calendar year. The Application must be revised to state the number of representative samples that will be taken.
7. **Section 3 Waste Analysis Plan, Inspection and Fingerprinting, Page 10:** In accordance with title 22 California Code of Regulations Section 66270.14(b)(2), a facility must analyze the chemical and physical analyses of the hazardous waste and hazardous debris to be handled at the facility. At a minimum, these analyses shall contain all the information which must be known to transfer, treat, store or dispose of the wastes properly. Fingerprint tests must specify clear parameters. The Application lists "color" and "particle size" as the visual inspection parameters, but the application does not include acceptable criteria for these parameters. The Application must be revised to additionally state which colors are acceptable and what particle sizes or ranges are acceptable.
8. **Section 4 Facility Design – Storage:** According to California Code of Regulations, title 22, section 66270.13(h), the application must include photographs of the facility clearly delineating all existing structures and existing treatment and storage areas. Atlas must include a photo of each storage area.
9. **Section 4 Facility Design – Storage, Table 5 Storage Areas, Page 11:** As stated in comment #5 above for Table 2, Table 5: Storage Areas includes the maximum number of containers for each storage area, but it is not clear if this is the maximum number of containers regardless of container size. It appears that the maximum capacity of 1,500 pounds will accommodate more 5-gallon containers than 35-gallon containers. The Application must be revised to clarify the basis for the maximum number of containers listed in Table 5.
10. **Section 5 Facility Design - Treatment, Page 14:** According to California Code of Regulations, title 22, section 66270.13(h), the application must include photographs of the facility clearly delineating all existing structures and existing treatment and storage areas. Atlas must include a photo of each treatment unit.

11. **Section 5 Facility Design - Treatment, Page 14:** As stated in Comment #35 below, the roasting kilns, ball mills, screens, and blender are miscellaneous units pursuant to the definition in title 22 CCR Section 66260.10. Pursuant to 22 CCR Section 66270.23, owners and operators of facilities that treat hazardous waste in miscellaneous units shall provide the following additional information:
- (a) A detailed description of the unit being used or proposed for use, including the following:
 - 1) physical characteristics, materials of construction , and dimensions of the unit;
 - 2) detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of sections 66264.601 and 66264.602.
 - (c) information on the potential pathways of exposure of humans or environmental receptors to waste constituents, hazardous constituents and reaction products, and on the potential magnitude and nature of such exposures.

In particular, the application must be revised to include detailed descriptions of the miscellaneous units (manufacturers' information will suffice), and how they will be operated to prevent any release that may have adverse effects on human health or the environment due to migration of waste constituents, hazardous constituents, or reaction products, in the air.

For the roasting kilns, the application must be revised to describe the emissions from the units; how emissions are routed/vented; the potential for the emission and dispersal of gases, aerosols, and particulates; the effectiveness and reliability of the afterburners to reduce or prevent emissions of hazardous constituents to the air; and the potential for health risks caused by human exposure to constituents of concern.

12. **Section 8 Inspection Plan:** The Inspection Plan specifies a schedule and method of inspection for various equipment, structural and operational features of the facility. The Inspection form in the renewal application only includes some of the items listed in Table 6. Atlas must include an inspection form(s) for all items listed in Table 6.
13. **Section 8 Inspection Plan, Page 22:** Add labeling as part of Item 4. At the bottom of the page, include a section to write in the time of the inspection. In the comment section instructions, add that the comments must state both the specific issue and its corrective action.

14. **Section 9 Contingency Plan, Page 23:** The first paragraph of this page states that the plan has been prepared in accordance with the requirements described in Section 66265.50 – 66265.56 of Title 22 of the California Code of Regulations. This is an incorrect reference. The referenced sections apply to interim status facilities. The correct sections applicable to preparation of the Contingency Plan are 66264.50 through 66264.56. The Application must be revised to correct this reference.
15. **Section 9 Contingency Plan, Page 23:** Pursuant to Title 22 California Code of Regulations, Division 4.5, Chapter 20, Appendix I, changes to the contingency plan require a Class 1 or Class 2 permit modification. The Application must be revised to state that, in addition to review and amendment to the plan, the appropriate modification request will be submitted to DTSC when any of the events listed in Section 9.1 Introduction occur.
16. **Section 9 Contingency Plan, Page 24:** According to Title 22 California Code of Regulations Section 66264.55, an emergency coordinator must be available at all times. Atlas has included the phone number but not the addresses of the emergency coordinators. Addresses for the emergency coordinators must be included.
17. **Section 9 Contingency Plan, Emergency Procedures, Page 25:** Atlas details actions facility personnel shall take in response to a release at the facility but does not include a description of emergency procedures for a fire. Pursuant to title 22 California Code of Regulations Section 66264.52, the contingency plan must describe the actions facility personnel shall take in response to fires and explosions as well as any unplanned sudden or non-sudden release. The Application must be revised to include a description of emergency procedures for fires and explosions in the next application submittal.
18. **Section 10 Closure Plan:** The Closure Plan begins on page 51, but the previous section ends on page 28. It is not clear if pages are missing from the Application. The Application must be revised with correct page numbers.
19. **Section 10 Closure Plan:** The closure plan does not include a discussion of partial closure. In accordance with Title 22 California Code of Regulations Section 66264.112(b), the closure plan shall identify steps necessary to perform partial or final closure of the facility at any point during its active life in addition to steps necessary to perform final closure of the facility at the end of its active life. The Application must be revised to include identification of the steps necessary to perform partial closure.
20. **Section 10 Closure Plan, part 10.2 Closure Performance Standard, Page 51**
In accordance with Title 22 California Code of Regulations Section 66264.111, a facility must close in a manner that minimizes the needs for further maintenance

and protects human health and the environment. Though Atlas does describe its closure performance standards, Atlas also needs to describe what it will do (what performance standards it will use) if background levels cannot be achieved).

21. Section 10 Closure Plan, part 10.3 Maximum Inventory Estimates, Page

51: In accordance with title 22 California Code of Regulations Section 66264.112(b)(3), a facility must give DTSC an estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility. Atlas specifies in this section that the maximum hazardous waste inventory that will be at the facility at any one time is 1500 pounds. However, in the 1093A form, Atlas describes the in-process storage area and shipping area as each having a total storage volume of 1500 pounds, the roasting kilns having a batch size of 40 to 50 pounds each batch, the ball mills with a typical cycle volume of 30 pounds, the vibratory screens with a typical batch size of 50 pounds, and the cone blender with a batch size of 400 pounds. It appears that all of the storage and treatment units were not included in the calculation of the maximum inventory. The Application must be revised to include all storage and treatment units in the calculation of the maximum inventory, in addition to estimates for quantities of waste generated during closure, preferably in a table format.

22. Section 10 Closure Plan, part 10.4 Waste Removal/ Treatment, Page 51:

The Application states that decontamination debris will be containerized and shipped to an off-site hazardous waste treatment, storage, and disposal facility. Pursuant to title 22 CCR Section 66264.112(b)(3), a detailed description of the methods to be used for removing, transporting, treating, storing or disposing of all hazardous wastes, must be provided and the type(s) of the off-site hazardous waste management units to be used must be identified. The number of containers and size of container, the location of the off-site hazardous waste facility and the distance from the Facility is not provided in the Application. These details are needed for DTSC to properly evaluate the Closure Cost Estimate because the cost of disposal will also include the associated transportation costs which will depend on the distance that must be travelled to the off-site disposal site. Table 7 entitled "Estimated Closure Cost" includes a unit cost of \$1.00 per gallon for "Transportation and disposal of waste from vacuuming floors and equipment," and \$1.50 per gallon for "Transportation and disposal of washwater from storage and processing areas" and "from cleaning equipment", and \$500 per drum for "Transportation and disposal of disposable equipment and debris from cleaning". It is unclear what assumptions about the distance from the Facility to the off-site disposal site have been made to prepare the estimate in terms of transportation costs to dispose of the contamination.

In order for DTSC to evaluate the closure cost estimate, the Application must be revised to include type of and assumed distance to the disposal site.

23. **Section 10 Closure Plan, part 10.5 Decontamination, Page 52:** In accordance with title 22 California Code of Regulations Section 66264.112(b)(5), a facility must include a detailed description of all activities necessary during closure to ensure that closure satisfies closure performance standards (title 22 CCR Section 66264.111). The Application must be revised to state how the water from high pressure washing will be contained.

24. **Section 10 Closure Plan, part 10.6 Confirmation Sampling Plan for Structures, Equipment and Buildings, Page 52:** Eight (8) surface wipe samples are proposed from the floors and walls of the Sweeps Storage and Processing Room, however, the locations of these proposed samples are not described or shown. The Application must be revised to include a sampling map showing the proposed locations of the wipe samples.

25. **Section 10 Closure Plan, part 10.6 Confirmation Sampling Plan for Structures, Equipment and Buildings, Page 52:** Two (2) wipe samples are proposed from the walls or floors in office areas or "other accessible areas" that are separate from the hazardous waste processing areas to establish background concentrations. The Application must be revised to show the proposed locations of these samples on a figure for DTSC concurrence. The application must also be revised to state that the background samples will be taken from areas made of the same material as the storage and treatment areas.

26. **Section 10 Closure Plan, part 10.6 Confirmation Sampling Plan for Structures, Equipment and Buildings, Page 52:** For clarity, please revise the Application to include a table showing the number of samples, where samples will be taken (storage area, office, treatment area, specific treatment unit), and what each sample will be tested for.

27. **Section 10 Closure Plan, part 10.6 Confirmation Sampling Plan for Structures, Equipment and Buildings, Page 52:** In order for DTSC to evaluate the effectiveness of the proposed confirmation sampling to demonstrate compliance with the closure performance standard, the Application must be revised to include a description of the proposed wipe sampling procedure .

28. **Section 10 Closure Plan, part 10.6 Confirmation Sampling Plan for Structures, Equipment and Buildings, Page 52:** The closure plan does not include a description of the sampling and analysis of washwater, but the cost of washwater samples is included in the Estimated Closure Cost, Table 7. The Application must be revised to include washwater sampling and analysis in the Closure Plan.

29. **Section 10 Closure Plan, part 10.8 Analytical Test Methods, Page 52:** In accordance with title 22 California Code of Regulations Section 66264.112(b)(4), a facility must include a detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment, and criteria for determining the extent of decontamination required to satisfy the closure performance standard. Atlas specifies that they will analyze wipe samples for metals but doesn't specify which metals. The Application must be revised to specify the metals for which samples will be analyzed.
30. **Section 10 Closure Plan, Table 7 Estimated Closure Cost, Page 54:** The Estimated Closure Cost does not include sufficient detail for DTSC to evaluate its validity. For activities that involve labor hours (Removal of processing equipment, vacuum and pressure wash of floors and equipment, and labor for sampling equipment and flooring surfaces and washwater), the assumptions for the number of hours is unclear. The Estimated Closure Cost does not indicate the number of laborers assumed. The application must be revised to include the assumption for the number of laborers included in the hours estimate.
31. **Section 10 Closure Plan, Table 7 Estimated Closure Cost, Page 54:** The Closure Cost needs to include the removal and disposal of containers, piping and trays.
32. **Section 10 Closure Plan, Table 7 Estimated Closure Cost, Page 54:** It is not clear if the estimated costs for transportation and disposal of waste inventory, processing equipment, decontamination water, etc. include the cost of transportation. The Estimated Closure Cost does not include enough information for DTSC to evaluate its validity. The Estimated Closure Cost must be revised to indicate the transportation cost and include the assumed mileage/distance to disposal facility.
33. **Section 10 Closure Plan, Table 7 Estimated Closure Cost, Page 54:** In part B Removal and Disposal of Equipment, there is no cost for the disposal of processing equipment. Pursuant to CCR Section 66264.142 (4) "the owner or operator shall not incorporate a zero cost for hazardous wastes, or non-hazardous wastes if applicable under section 66264.113(d), that might have economic value". The Estimate Closure Cost must be revised to include a cost for the transportation and disposal of processing equipment.
34. **Section 10 Closure Plan, Table 7 Estimated Closure Cost Page, 54:** The Estimate Closure Cost assumes pressure washing of 165 square feet of storage and processing surface areas. It is not clear why 165 square feet is assumed. It appears from the dimensions of the sweeps storage and processing area shown on Figure 2 that the area of the floor and walls to be decontaminated would be

more than 1,000 square feet and generate approximately 4,000 gallons of washwater. The Estimated Closure Cost must be revised to include all of the surface area to be washed in the washwater volume calculation and describe how the area is calculated.

35. **Figure 4 Sweeps Storage and Processing Room:** Pursuant to California Code of Regulations, title 22, section 66270.13(h), the application must include a scale drawing of the facility showing the location of all past, present and future treatment, storage, and disposal areas. The Application includes two storage areas: In Process storage area and Shipping storage area. Labels for these areas are shown on Figure 4, but the boundaries and dimensions of the storage areas are not shown. The Applications must be revised to show the boundaries of the 6'x9' and 5'x9' storage areas on the figure. Additionally, the lab must be labeled in the Figure. If there are any sinks or drains in the processing areas, these must also be noted.
36. **Section 10 Closure Plan, Table 7 Estimated Closure Cost, Page 54:** The Estimated Closure Cost does not provide the basis for the PE inspection and certification cost. The PE certification cost can be estimated to be around 10% of the cost to close the facility. The Application must be revised to include the basis for the PE inspection and certification cost or increase to at least 10% of the total closure cost.
37. **1093A Form:** There are two pages #8 and seven pages #9 included in the 1093A Form. The Application must be revised so that the pages of the 1093A Form are numbered sequentially.
38. **1093A Form, Page 1:** The Application indicates (Section 3 Waste analysis Plan) that Atlas stores and treats only solid hazardous wastes. However, on page 1 of the 1093 A Form Atlas has entered 1500 gallon/month liquid under both "A" total hazardous waste treatment volume, and "B" total hazardous waste storage capacity. The Application must be revised to correct this discrepancy. If Atlas will not be storing or treating any liquid waste, the 1500 gallons liquid must be removed from the 1093A Form.
39. **1093 A Form, Hazardous Waste Facility Standardized permit Unit-Specific Forms, page 10 through 16:** The process code listed on the unit-specific forms for treatment processes is T1-Treatment in containers. The roasting kilns, ball mills, screens, and blender are miscellaneous units pursuant to the definition in title 22 CCR Section 66260.10. The Application must be revised to list process code X03- thermal unit for the roasting kilns, and X02-mechanical processing for the ball mills screens, and blender.
40. **1093A Form:** For all the treatment units, since waste is treated by batch, the process design capacity should be listed as the maximum batch size for each

unit. Atlas needs to change all the process design capacities for each treatment to show the maximum batch size.

41. **1093A Form Summary of Equipment Information Table:** Atlas must add the construction material to the table e.g., stainless steel.