



Town of Clarkdale

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November 14, 2016

Arizona Department of Environmental Quality
Voluntary Remediation Program
Attention: John Patricki
1110 W. Washington Street
Phoenix, AZ 85007

RE: United Verde Soil Program (UVSP) – Remedial Action Work Plan (RAWP) Comments

Dear Mr. Patricki:

The Town of Clarkdale appreciates the opportunity to review and comment on the RAWP for Freeport Minerals Corporation's (FMC) soil remediation project being performed in Clarkdale. The Clarkdale Town Council has approved the submission of this letter and the attached comments on behalf of the Town of Clarkdale.

While a number of our comments simply seek to provide clarity and accuracy to certain statements within the document, others focus on the following larger issues that we consider substantive flaws in the RAWP, including:

- The Town of Clarkdale has concerns about the proposed location for the Excavated Soil Staging Area (ESSA) and the Soil Repository. Both lie on property that is currently zoned for residential use by Yavapai County, and both areas are within 100 feet of property within the Town of Clarkdale which has a zoning entitlement for Verde Valley Ranch, a proposed mixed-use development with 900 residential units.
- Both the ESSA and the Soil Repository are also immediately adjacent to Tavasci Marsh, which is a component of the Verde River system, a part of Tuzigoot National Monument and habitat for many unique and sensitive species. An Aquifer Protection Permit (APP) must be obtained to own or operate a facility that discharges a pollutant either directly to an aquifer, to the land surface, or the vadose zone in such a manner that there is a reasonable probability that the pollutant will reach an aquifer. Due to proximity to Tavasci Marsh, groundwater is expected to be shallow, possibly within a few feet of the bottom of the currently existing lined "pond" that was designed and constructed in the past, and never utilized, as an effluent holding facility. It is reasonably probable that metals or soil containing elevated concentrations of metals will impact the shallow aquifer, Tavasci Marsh, and Verde River. That said, Freeport must demonstrate that using the existing lined retention pond to contain impacted soil will be compliant with the APP program and be the most appropriate Best Available Demonstrated Control Technology (BADCT) as described in this RAWP.

- The RAWP lacks any reference to the replacement soil for the project. At a minimum, the plan should address the location and source for replacement soil for the project, the sampling and analysis protocol that will be used for the replacement soil, any transportation impacts relating to the replacement soil, and any permitting issues that may arise due to the location and process for excavating replacement soil. Backfill or replacement soil should be selected to ensure that it is a suitable replacement for the removed native soil in characteristics, texture and structure.
- Property owners who participate and have their properties remediated should be offered the option of having the interior of homes cleaned after the remediation process in the event that dust may have gotten into the house during the remediation process. (Note: This addition aligns with a statement by a FMC representative at the May 19, 2015 Clarkdale public meeting.)
- Section 3.4 asserts that “The material excavated from the cleanup properties that is hauled to the ESSA will not be considered to be hazardous waste pursuant to the applicable regulations of the Resource Conservation and Recovery Act (RCRA) because it remains within the area of concern, therefore transporters of this material will not require licensing as hazardous waste transporters.” Freeport needs to better explain how the ESSA and Soil Repository can be considered the same “area of concern” as each individual property in the designated Project Area within the Town.
- The RAWP lacks consistency with statements made by Freeport representatives at public meetings in Clarkdale, and with responses to concerns previously brought forward by the Town during review of the Sampling and Analysis Plan for the UVSP.
- The RAWP lacks specifics for planning for increased commercial traffic and other impacts on Tuzigoot Road and/or Sycamore Canyon Road. Tuzigoot Road is owned and maintained by the National Park Service, and is often used by pedestrians who recreate in the area.
- Freeport needs to explicitly say in this RAWP that Freeport will be the generator of any and all solid and hazardous wastes associated with the United Verde Soil Program.
- There is no reference to coordination with Yavapai County on permitting requirements that may be necessary due to the location of the proposed ESSA and the Soil Repository within residentially zoned property located in Yavapai County.

Thank you again for the opportunity to comment. We trust that the Town of Clarkdale’s comments, along with those of other agencies, citizens and stakeholders in the Clarkdale-area will be given due consideration, and result in amendments to the RAWP to adequately address our concerns. Please do not hesitate to contact me if you have any questions.

Sincerely,



Gayle Mabery
Town Manager

c: Alicia Voss, Freeport Minerals, UVSP Project Manager
Clarkdale Town Council

Enclosure



**Town of Clarkdale Comments on
Remedial Action Work Plan for the United Verde Soil Program
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The Town of Clarkdale has completed a review of the draft Remedial Action Work and have the following comments and concerns regarding the content of this document. Italicized text indicates text to be added, strikethrough text indicates text to be deleted.

1. Introduction:

Third paragraph/first sentence should be rewritten for accuracy. Both ADEQ and the Town of Clarkdale have raised question in the past as to the reason that the initial Study Area was selected and how that Study Area will be expanded in the future. We recommend the following amendment to improve the accuracy of the statement:

'The Study Area, *exclusive of the original smelter site*, includes ~~most~~*some* properties likely to have been affected by ...

1.1 First paragraph – The objective of the UVSP ... within ~~individual~~ ...

Comment: The Town requests clarification of Table 1.1 as to which Cleanup Level will apply to Town Parks.

2. Cleanup Activities

Comment: The RAWP does not include any details relating to the replacement soil that will be used for this project.

3.1.1 Property Access

Third paragraph/last sentence – property owner *or their representative*

3.1.2 Town of Clarkdale Permits

First paragraph/First sentence: ... to grading and rights-of-way permits *and any other legal requirement of the Town of Clarkdale*. Second sentence: excavations ~~greater than or equal to 50 cubic feet~~, a grading permit and rights-of-way permit, ~~if necessary as required~~, will be...

Comment: Article 7-11 Excavation and Grading of the Town of Clarkdale Town Code as amended by Ordinance #371 requires a permit for ALL projects involving cut and fill of materials. This requirement is not based on the quantity of cut and fill.

3.1.3 Pre-Excavation Area Preparation

Second paragraph/third sentence – remediation *may* Flowerbeds (unless the owner requests otherwise); *and other landscaped treatments* and ...

Fifth paragraph/second sentence – delete the word physically.

Comment: Language should be added to this paragraph addressing the process for relocating/boarding pets, poultry and livestock.



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Language should be added that CPC will arrange and pay for off-site storage if required as previously committed to by FMI representatives.

3.1.4 Excavation Activities

Fourth paragraph/second sentence states that excavations will be performed to a maximum depth of two feet.

Comments: This section is inconsistent with statements made during a public meeting in Clarkdale on May 19, 2015, where Freeport's Project Manager Alicia Voss said *'they may go deeper than 2 feet depending on the test results found at the 2 feet depth...'*.

Terminating excavations at a maximum depth of two feet without collecting and analyzing soil at the **base** of each excavation is unacceptable, not typically allowed by any regulatory agency or State or Federal regulation, and is not standard practice if impacts in soil exceed a certain cleanup concentration; in this case, the "Residential Cleanup Level by Land Use" (CL) for each "Target Constituent" (TC). If samples collected and analyzed from "Interval D" indicate that any TC concentration exceeds a CL then further sampling must be completed at and below 24 inches to properly and responsibly determine if impacts reside deeper than this RAWP contemplates. This data would then be used on a case-by-case basis to determine if that soil should be removed to further minimize human contact in the future should the property owner make improvements to their property that contacts soil at that depth. That said, Freeport has an obligation to inform each property owner if soil residing at or below 24 inches is impacted above a CL for any TC so that the property owner can be involved with how this matter is resolved.

Additionally, Freeport should be obligated to add a declaration of environmental use restriction (DEUR) to each property where remediation is completed and impacts are left in place at or below 24 inches.

Seventh Paragraph – Add the following language: *Utility companies shall be notified of any damage to their infrastructure and a Town of Clarkdale permit shall be required for repair to water, gas and electric lines and infrastructure.*

Eleventh Paragraph – Add the following language: *Removal or location of existing fences shall be noted on the original Town of Clarkdale grading permit submission if possible, or submitted as an addendum to the original permit to assure accuracy of the permanent property file records at the Town of Clarkdale.*

3.1.4 Excavation Activities (continued)

In Section 3.1.4, Freeport says that properties will be sampled according to the Sampling and Analysis Plan (SAP) (GHD, 2015a). The Town is highly concerned that Freeport is not planning to sample the 3-6 inches interval and Freeport claims that *"the 0-3 inch interval is used to best represent the surface soil that may have been impacted by air deposition from the former smelter. Furthermore, the 3-6 inch interval is not likely to have more air deposition impact than the 0-3 inch interval. As will be explained in the RAWP, if the 0-3 inch interval exceeds any TC, the 0-6 inch interval will be removed as a practical excavation technique and, and therefore, is addressed."* The Town did not see that clarification in this RAWP as promised by Freeport and that should be included in the final RAWP.

Additionally, the Town agrees that the current approach to remove the 0-6 inches interval 'practically' address this concern. However, unless Freeport plans to collect a statistically significant number of samples from all intervals, including the 3-6 inches interval and analyze those samples for each TC, then this approach and Freeport's explanation is flawed. Freeport's explanation is flawed because the 3-6 inches interval can exceed the 0-3 inches interval TC concentrations because deposition from the smelter



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stopped approximately 60 years ago. During the last 60 years, TCs have likely leached deeper, the soil at many if not all properties has been disturbed and impacts redistributed into the 3-6 inches interval, and intentional and natural soil accumulation at land surface of native soil not impacted by the smelter (the 0-3 inches interval) can likely be the interval with the *lesser* impacts. Unless Freeport plans to demonstrate with data rather than a potentially flawed theory, that *“the 3-6 inch interval is not likely to have more air deposition impact than the 0-3 inch interval”*, then the 3-6 inches interval should be sampled and analyzed in the event the 0-3 or the 6-12 inches intervals demonstrate that CLs are not exceeded at 0-3 or the 6-12 inches intervals, and therefore no remediation potentially occurs.

The Town highly recommends that Freeport follow a more typical sampling and analysis approach implemented under Order and Consent by the United States Environmental Protection Agency (USEPA), Region 4, whereby the Responsible Parties (RPs) were obligated to follow the provisions of the agreed upon “Administrated Agreement and Order on Consent for Removal Action” relating to the Anniston Lead Site (AOC). Phelps Dodge Industries, Inc. (Freeport) was a “Respondent” in that matter.

In the Anniston Lead Site Quality Assurance Project Plan dated March 15, 2005, Section 4.0, Sampling Rationale, references used to prepare the sampling methods are:

- A Compendium of Superfund Field Operations Methods (EPA/540/P-87/001)
- Samplers and Sampling Procedures for Hazardous Waste Streams (EPA-600/2-80-018)
- Test Methods for Evaluating Solid Wastes-Physical/Chemical Methods (EPQ SW-846, Third Edition, April 1998)
- Superfund Lead-Contaminated Residential Sites Handbook (OSWER 9285.7-50, August 2003)
- XRF SW 846 Draft Method 6200.

Section 4 goes on to say... *“Confirmation sampling will consist of a screening XRF sampling for lead and a composite laboratory analyzed sampling for lead. XRF screening will be performed at the **base** of excavations to verify the complete removal of soils with lead concentrations above 400 ppm and to delineate areas, if any, that require additional excavation and removal. Composite soil samples will be collected from the **base** of excavations and sent to a laboratory for confirmation that the remaining soil meets the removal confirmation criteria of 400 ppm lead, as specified in the AOC.”* Section 4.1.1 of the QAPP further says that *“After excavation is complete, and XRF screening has demonstrated that lead concentrations in subgrade soils are less than 400 ppm, a composite sample will be collected from the **base** of the excavation for laboratory analysis of total lead.”* That said, Freeport should revise this draft RAWP and simplify the approach by collecting and analyzing samples from each interval to determine the concentrations of each TC and remediate accordingly. Additionally, confirmation samples should be collected from the **base** of each excavation to demonstrate that subgrade soils are less than each CL for each TC. The City believes this approach will satisfy the concerns relating to not collecting and analyzing soil samples from the 3-6 inches interval. Alternatively, the City’s concerns can be minimized if Freeport plans to collect a statistically significant number of samples from all intervals, including the 3-6 inches interval and analyze those samples for each TC to demonstrate the approximate concentrations, at depth in soil for each TC and prove that *“the 0-3 inch interval is used to best represent the surface soil that may have been impacted by air deposition from the former smelter.”*

Why is Freeport not using an x-ray fluoresce analyzer to screen soil in the field to determine in real time the approximate concentrations of each TC in soil at each interval, including the **base of each excavation**?



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3.1.5 Loading Excavated Materials

Third Paragraph/second sentence: Dust control *methods in compliance with Town of Clarkdale regulations* will be maintained ...

3.1.6 Noise Control

Add the following language: *Article 10-1-11 of the Town of Clarkdale Town code shall apply to noise complaints submitted to the Town of Clarkdale, regardless of the CPC's assessment.*

3.1.7 Dust Control

Comment: Per Section 7-11. Q of the Town of Clarkdale Town Code, either a dust palliative or reclaimed water shall be used for the alleviation or prevention of dust. Dust control methods consistent with the

2012 International Building Code as adopted by the Town of Clarkdale and with Article 7-11 Excavation and Grading of the Town Code shall be enforced including the cessation of all activity during active red flag warnings.

3.1.8 Access for Property Residents

Add the following language: *Should residents need to relocate during the remediation, the CPC or FMI will work with those residents and will cover those expenses.*

3.1.9 Decontamination Procedures

Add the following language: Property owners will be offered the option of having the interior of homes cleaned after the remediation process in the event that dust may have gotten into the house during the remediation process. (Note: This aligns with a statement by a FMI representative at the May 19, 2015 Clarkdale public meeting.)

Comment: This section should address the plan for rainy days.

3.1.10 Backfill and Revegetation of Excavated Area

First paragraph, last sentence: In addition, all excavations ~~over 50 cubic feet~~ will require ...

Second paragraph/Add the following language: *Backfill or replacement soil should be selected to ensure that it is a suitable replacement for the native soil in characteristics, texture and structure and conforms to the approved grading permit.*

Sixth paragraph: Replace the word desert with xeriscape.

Comment: Scheduling for the watering of any landscape should coordinate with the Town of Clarkdale's Drought and Water Shortage Preparedness Plan. In addition, consideration shall be given as to whether the time of year is appropriate for planting and replanting, given any watering restrictions in place at the time.



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3.1.11.2 Repair Work

Comment: Is there an appeal method for property owners?

3.2 Excavated Soil Staging Area

Comments: Freeport needs to better explain its plan relating to activities contemplated at the Excavated Soil Staging Area (ESSA). This section says that the property (the ESSA and Soil Repository) is owned by Freeport and that *“at its own discretion, elect to treat the weekly excavated stockpile as described in the Excavated Soil Staging Area Operations Plan (Appendix B) if there is a history of untreated weekly excavated stockpiles exceeding the TCLP and/or SPLP threshold concentrations”*. Freeport’s concept of “area of concern” is too broad and not consistent with the Resource Conservation and Recovery Act (RCRA) or the National Contingency Plan (NCP) and cannot include commercial, public, residential properties *and* the ESSA and Soil Repository which are approximately 1.0 mile from the subject commercial, public and residential properties being remediated; in general, the entire Town, public land and land owned by Freeport cannot be considered an “area of concern”. If Freeport desires to apply the “area of concern” concept allowed by RCRA, that “area of concern” must be limited to the subject and impacted properties being remediated, and the ESSA and Soil Repository not be included as part of the “area of concern”. That said, treating “Characteristic Hazardous Waste” at the ESSA must be consistent with RCRA and a Treatment Storage and Disposal Part A and Part B permits must be obtained before these activities can be allowed.

Section 3.2 does not describe how many samples will be collected per cubic yard of potentially “Characteristic Hazardous Waste” and how those samples will be handled to determine the impacts contained in the excavated soil removed from the subject properties. Appendix B does contain further information; however, Freeport should do a better job explaining the details associated with federal regulations relating to collecting representative samples, how Freeport is going to employ RCRA requirements, specifically “Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, also known as SW-846, in order to be consistent with RCRA. Because the ESSA likely cannot be part of the overly broad “area of concern” currently being contemplated, Freeport needs to describe how these activities would be completed at each subject property, rather than the ESSA, in order to not violate RCRA and transport potentially “Characteristic Hazardous Wastes” on Town, County and Federally owned roads without proper permits. Further, Freeport needs to explain how and where “Characteristic Hazardous Wastes” will be disposed in a permitted Hazardous Waste landfill, and not treated at each subject property contained within the more reasonably sized “area of concern” because treatment at each property is not desirable nor practical.

What operations, maintenance, and monitoring activities will Freeport implement to ensure that this area is not disturbed, waste is not removed, waste is not blown and spread, waste is not eroded by surface water, and if and what type of groundwater monitoring will be implemented to ensure that a groundwater and/or surface water resource is not impacted in the future?

How will the excavated soil be profiled and managed if it fails either TCLP or the SPLP testing procedures?

The area for the stockpiled material is outside the jurisdiction of the Town of Clarkdale and under the authority of Yavapai County. The RAWP does not address any permit requirements from Yavapai County.



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3.3 Final Excavated Soil Management

Comments: Section 3.3 does not describe how the soil will be “profiled” and managed if that soil fails either the TCLP or the SPLP testing procedures. As stated above, Freeport’s “area of concern” concept is not likely consistent with RCRA and excavated soil from each property must be properly characterized and “profiled” before non-hazardous soil is relocated to the ESSA or Soil Repository, or to a Hazardous Waste Landfill depending on the TCLP or the SPLP results. Additionally, discrete samples must be collected at the bottom of each excavation so that at a minimum property owners understand deeper soil conditions at their property to avoid being exposed to unacceptable soil impacts; or, these data should be used by Freeport to further excavate impacted soil below 24 inches should soil impacts exceed the Residential Cleanup Levels (CLs).

This section also needs to address what happens to water that accumulates in the lined pond. Additionally, if the lining in the pond is integral to the project, Freeport should demonstrate that the integrity of the liner is appropriate for the project. The liner was placed in the pond more than 10 years ago, has been exposed to the elements, and has had very little, if any, maintenance since that time.

3.4 Soil Transportation

Comments: The borrow soil site needs to be identified. Documentation needs to be included as to how many samples per cubic yard will be collected and analyzed to determine the borrow soil is from a suitable source. Freeport needs to describe how they are going employ US Environmental Protection Agency (USEPA) guidance, or specifically SW-846 to determine the appropriate numbers of samples will be collected, treated, and analyzed. In addition to analyzing borrow soil for arsenic, copper, lead, tin, zinc, and boron; Freeport needs to also analyze potential borrow soil for benzene, toluene, ethylbenzene, and xylenes (BTEX), and for volatile organic compounds (VOCs).

All transportation shall conform with the approved traffic plan for the initial grading permit.

Section 3.4, 5th paragraph says *“The material excavated from the cleanup properties that is hauled to the ESSA will not be considered to be hazardous waste pursuant to the applicable regulations of RCRA because it remains within the area of concern; therefore, transporters of the material will not require licensing as hazardous waste transporters.”* This Town disagrees with Freeport’s concept of “area of concern”. Freeport’s concept is too broad and not likely consistent with RCRA or the NCP and cannot include commercial, public, residential properties *and* the ESSA and Soil Repository which are approximately 1 mile from the subject commercial, public and residential properties being remediated; in general, the entire Town, public land and land owned by Freeport cannot be considered an “area of concern”. If excavated soil at each subject impacted property fails TCLP analyses, then Freeport needs to comply with RCRA in its entirety. Likewise, Freeport appears to assume it need not comply with handling and transportation requirements because of the CERCLA exemption described in §121(e) of CERCLA, 42 USC 9621(e). Freeport needs to substantiate why it need not comply with these requirements. Even where it applies, this CERCLA permit exemption only applies to work completed onsite and requires substantive adherence to this Section and permit requirements. Additionally, Freeport needs to explicitly say in this RAWP that Freeport will be the generator of any and all solid and hazardous wastes. If Freeport desires to apply the “area of concern” concept allowed by RCRA, that “area of concern” must be limited to the subject and impacted properties being remediated, and the ESSA and Soil Repository not be included as part of the “area of concern”. That said, treating “Characteristic Hazardous Waste” at the ESSA must be consistent with RCRA and a Treatment Storage and Disposal Part A and Part B permits must be obtained before these activities can be allowed. Freeport should describe in writing how their “area of concern” concept is allowable and consistent with Federal and State laws and regulations as they apply to this RAWP.



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Eight Paragraph/last sentence – Police reports for any incident on public property shall be filed with the Town of Clarkdale Police Department.

4. Construction Management Considerations

4.1 Scheduling of Cleanup Properties

Comment: The regulatory reference is not appropriate for handling waste soil, profiling waste soil, transporting waste soil, accumulating waste soil, treating waste soil to remove “Hazardous Wastes” “Characteristics”, or finally disposing waste soil to the land.

Comment: Recreational properties need to be referenced in the scheduling protocol.

5. Reporting

Comment: The Town of Clarkdale requests electronic version of all reports related to Town owned property, including but not limited to complete laboratory testing reports.

5.2.1 Weekly Documentation

Add *Total number of parcels declining remediation*

Comment: Will maps at the parcel level be included in this weekly documentation? Will the Town of Clarkdale receive copies of these weekly reports?

5.2.2 Monthly Reporting

Comment: The Monthly Progress Reports that have been delivered to ADEQ to date do not include the level of detail as described in the RAWP. Those submitted so far have not included the narrative descriptions relating to significant developments during the preceding period, including actions performed and problems encountered, the activities anticipated over the next month, schedule of anticipated actions, and anticipated problems and planned resolution of past or anticipated problems.

5.3 Final Report

Add the following: The Town of Clarkdale and the public will be provided the opportunity to comment on the Final Report.

6. References

Fifth bullet point add: as revised by Ordinance #371, Resolution 1509 on 11/10/15; Effective 12/11/15.

Appendix A Fugitive Dust Control Plan

1. Introduction: Second Paragraph/Second Sentence – add the Town of Clarkdale to the list of observations of dust.

3. References: add the following language to the second bullet point: as amended by Ordinance #371



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Comment: The Town requests incorporating provisions for stationary dust sampling stations to be placed up- and downwind from the larger work areas to confirm dust control measures are adequate.

Appendix B Excavated Soil Staging Area Operations Plan

Comment: The Town of Clarkdale has concerns about the proposed location for the staging area. The area is immediately adjacent to property within the Town of Clarkdale which has a zoning entitlement for Verde Valley Ranch, a proposed mixed-use development with 900 residential units. The subject property is under the administration of Yavapai County and zoned for single-family development.

An Aquifer Protection Permit (APP) must be obtained to own or operate a facility that discharges a pollutant either directly to an aquifer, to the land surface, or the vadose zone in such a manner that there is a reasonable probability that the pollutant will reach an aquifer. The ESSA is within a few hundred feet of the Tavasci Marsh, a component of the Verde River system. As such, groundwater is expected to be shallow, possibly within a few feet of the bottom of the currently existing lined "pond" that was designed and constructed in the past for a different purpose. It is reasonably probable that metals or soil containing elevated concentrations of metals will impact the shallow aquifer, Tavasci Marsh, and Verde River. There are numerous requirements specified in the APP program, however, special attention should be paid to the following items: 1) Best Available Demonstrated Control Technology (BADCT, pronounced "bad cat"). Freeport must show that the best demonstrated control technology will be used by the facility. 2) Freeport must show that Aquifer Water Quality Standards (AWQS) will not be exceeded in the aquifer at the point of compliance as a result of discharge from the facility. If the level of a pollutant in the aquifer already exceeds the AWQS at the time of permit issuance, the aquifer must not be further degraded as a result of the discharge. 3) Freeport must show that they have the financial and technical capability to operate in accordance with the permit. In most cases, individual permits are issued for the operational life of the facility. That said, Freeport must demonstrate that using the existing lined retention pond to contain impacted soil will be compliant with the APP program and be the most appropriate BADCT as described in this RAWP.

Figure B-1

This figure shows the locations for the ESSA and the Soil Repository Locations. Has Freeport evaluated if there any jurisdictional waters of the United States regulated by the Clean Water Act or the Clean Water Rule? In addition, has Freeport evaluated the actions associated with this RAWP that may trigger any evaluation under the Nation Environmental Policy Act?

Section 2.1.2 Erosion Control

Erosion control measures should be maintained in perpetuity around the Soil Repository, not just around the ESSA during the duration of the Soil Program cleanup activities. This would likely be required by the APP program which Freeport should be required to implement as it relates to this RAWP.

Section 2.2.1 Movement of Material within the ESSA

6 inches of suitable aggregate placed on top of a geotextile fabric should be considered the minimum control to minimize tracking soil, dust, or mud onto public right-of-ways. Freeport should also be required to make provisions for street sweepers and exit grids if the minimum control fails to contain soil



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within the ESSA. This would likely be required by the APP program which Freeport should be required to implement as it relates to this RAWP.

Section 2.2.2 Initial Material Segregation and Soil Characterization

Describes the numbers of grab samples to be collected from each stockpile and is reasonable as long as each pile is no greater than 1,000 cubic yards and each grab sample is collected from approximately equally spaced locations on and within the stockpile. Because potentially “Characteristic Hazardous Waste” should not be transported to the ESSA for sampling, profiling, and treatment because many provisions of RCRA could be violated, smaller soil stock piles should be created and managed at each individual property; therefore, limiting the size of each stockpile making the stockpile sampling plan reasonable.

2.2.3 Soil Management, Treatment and Storage

This section says “*FMC understands that management of excavated soil within the ESSA will be on a temporary basis, and soil may only be managed at this location for a maximum of one year from the time the soil was first placed in the ESSA until the soils can be placed into the Soil Repository*”. As described above, no “Characteristically Hazardous Waste” should be transported to the ESSA unless the proper permits are in place. Additionally, Freeport should describe how it will comply with State law relating to handling and managing non-hazardous waste at this location.

2.2.5 ESSA Decommissioning

This section repeatedly references “site-specific cleanup levels (CLs) for commercial land use”. To our knowledge, there is no site-specific cleanup level associated with the UVSP for “commercial land use”.

2.2.5.1 Sampling

This section says “*Each of the working areas of the ESSA... will be divided into 5,000 square foot grids and sampled for arsenic, copper, lead, tin, zinc and boron. Each grid will be sampled by collecting nine equally-spaced grab samples from within the grid.*” This section goes on and says “*If laboratory analytical results for a given grid are below the site-specific cleanup levels (CLs) for commercial land use, the soils within the grid will be eligible to remain in place or be used as restoration material (e.g., soil associated with storm water diversion berms).*” Immediately adjacent to the proposed ESSA, and lying only 100 feet from the Soil Repository, lies property that has an approved Development Agreement for a mixed use Planned Area Development in the Town of Clarkdale. That said, sometime in the future this immediately adjacent property may be residentially developed and Residential CLs should be used, **not** “Commercial” (Non-Residential) CLs to determine if remediation is required at the ESSA or if the soil is eligible to remain in place. In addition, if Freeport is compliant with the APP and implements a proper Storm Water Pollution Prevention Plan (SWPPP), using soil that exceeds the Residential CLs cannot and should not be used as “restoration material” because impacts would likely be spread to nearby sensitive habitats and surface waters.

2.3 Storm Water Management

This section seems to infer that storm water controls will be in place and managed only during the Soil Program. Freeport needs to make it clear that a compliant SWPPP will be developed and implemented in perpetuity to prevent erosion or water runoff from the Soil Repository. This is most important because



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there is a surface-water body and a sensitive marsh nearby that could receive eroded and possibly contaminated soil or water. This would likely be required by the APP and SWPPP programs which Freeport should be required to implement as they relate to this RAWP.

Appendix C Soil Repository Operations Plan

2. Site Work

2.1.1 Clearing Grubbing and Grading

Comment: Six inches of suitable aggregate placed on top of a geotextile fabric should be considered the minimum control to minimize tracking soil, dust, or mud onto public right-of-ways. Provisions should also be made for street sweepers and exit grids if the minimum control fails to contain soil within the ESSA.

2.1.2 Erosion Control

Comment: Erosion control measures should be maintained in perpetuity around the Soil Repository, not just around the ESSA during the duration of the Soil Program cleanup activities. This would likely be required by the APP program which Freeport should be required to implement as it relates to this RAWP.

2.2.4 Restoration

Comments: How will water drain from the lined basin? Will the Soil Repository be capped at ground level, or will there be a mound created at the site?

2.6 Long-Term Operation and Maintenance

Comments: Section 2.6 – Freeport plans to annually inspect, more frequently after a heavy rain, document, repair, and submit to ADEQ an annual report. The Town disagrees that management of this facility should stop after 10 years and Freeport must justify that 10-year limit in terms of regulatory programs that should be followed such as the APP and SWPPP.

The section also says “*At the completion of the UVSP, a declaration of environmental use restriction (DEUR) will be added to the property where the soil repository will be located.*” Freeport should clarify that this DEUR will be prepared and filed at the beginning of the active UVSP, before soil is received by the facility. Additionally, Freeport must describe their financial assurance plan, compliant with the APP or some other appropriate requirement.

There is no mention that groundwater monitoring wells will be installed and sampled to confirm that the “soil cap” and “liner” is functioning properly and that contaminants are not leaching into groundwater. At a minimum, Freeport should justify why they do not plan to monitor groundwater. This would likely be required by the APP program which Freeport should be required to implement as it relates to this RAWP.

Fourth paragraph/Notation should be added that the rainfall will be measured at the nearest weather monitoring station at Tuzigoot National Monument.



**Town of Clarkdale Comments on
Remedial Action Work Plan for the United Verde Soil Program
November 14, 2016**

Appendix D Storm Water Management Plan

1. Introduction

Comment: Does Freeport intend to submit the required Notice of Intent (NOI) which is required by the referenced General Permit. If Freeport does not plan to submit a NOI how can Freeport be compliant with the referenced General Permit?

2. Regulatory Basis

Comments: Freeport should confirm that they will be compliant and follow the most current General Permit and that General Permit will require a SWPPP. Why is Freeport planning to use what appears to be an expired General Permit (AZG2008-001) that may have expired February 28, 2013.

Freeport needs to confirm that the ADEQ Water Quality Division specifically reviews and approves this plan. It appears that Freeport's Storm Water Management Plan (SWMP) may be deficient and not a compliant Storm Water Pollution Prevention Plan (SWPPP).

3.2 Erosion Control Measures

Comment: This section says "*Erosion control measures will be implemented for the duration of the voluntary soil cleanup operations in the ESSA, BSA, and Soil Repository.*" Freeport should clarify if this also means during the active program, the 10-year inspection period, and thereafter.

4. Inspection and Maintenance

Comment: Reference should be incorporated that the monitoring station at Tuzigoot Monument shall be used so the location accurately reflects rain events at the Soil Staging Area and Soil Repository.

This section says that the storm water management features will be inspected as soon as practicable. If Freeport plans to implement the referenced General Permit (AZG2008-001) then the permit requires that an inspection occurs within 24 hours of the end of each rain event of 0.5- inches or greater; not

when practicable, and not after $\frac{3}{4}$ inches of rain. Freeport should develop and implement a SWPPP compliant with the referenced General Permit or the most current and applicable General Permit.

5. Monitoring Program Review and Modification

Comment: This section says that if a discharge occurs, the receiving stream will be sampled. Because this SWMP does not appear to be a complete SWPPP, discharge conditions and the receiving stream are not acknowledged or described. At a minimum, Freeport should implement a compliant SWPPP and ensure that there are no discharges to any receiving stream or sensitive habitats.