

Cyprus Amax Minerals Company 333 North Central Avenue Phoenix, Arizona 85004

February 28, 2014

Erik Hagen Site Coordinator Ohio Environmental Protection Agency 50 West Town Street, Suite 700 Columbus, Ohio

RE: Request for Confirmation of this Amendment Number 2 of the Interim Action Work Plan for the Former Satralloy Site

Mr. Hagen:

Cyprus Amax Mineral Company ("CAMC") hereby proposes to amend (Amendment Number 2) the Interim Action Work Plan for the Former Satralloy Site (the "Site") in accordance with paragraph 13.d of Section VI (Interim Action) and Section XII (Review of Submittals) of the Consent Order for Preliminary Injunction ("COPI") that was entered into by the parties. Pursuant to paragraph 32 of Section XII (Review of Submittals), "All work plans, reports, or other items required to be submitted to Ohio EPA under this COPI, including any approved additional Work, shall, upon approval by Ohio EPA, be deemed to be incorporated in and made an enforceable part of this COPI......". CAMC respectfully requests confirmation from the Ohio EPA that the Interim Action Work Plan for the Site is deemed to be amended in order to incorporate the additional Work outlined in this letter.

This Amendment Number 2 has been structured to respond to questions posed in Mr. Erik Hagen's January 27, 2014 email to Ms. Barbara Nielsen and Mr. Todd Anderson's February 12, 2014 email to Mr. Shane Farolino.

Reason for request (when it was discovered, where it came from, and why it was not anticipated in the IA workplan), and the general nature of the dust.

CAMC recently discovered the presence of generally between 2 to 6 inches of saturated dust on top of 5 flat roofs at the site (see below). The volume is estimated to be approximately 700 cubic yards. Because CAMC was unaware of the existence of the dust on the roofs of the buildings, this material was not addressed in the Interim Action Work Plan for the project. The flat roofs were never accessed previously for safety reasons. The Mill Building roofs vary in height from 35 to 55 feet (too high for ladder access) and require large man lifts to access. Because of load restrictions on the bridges to the Site, man lifts could not be safely mobilized to the site. It was not until CAMC's contractor installed a temporary short section of rail track that man lifts could be brought on to the Site. In addition, CAMC had no reason to believe that dust had been deposited on the roofs as they appeared dark gray and visually different from the dust and slag when viewed from the uplands (see attached photo). It is suspected that the dust was

deposited by both wind deposition and operational processes prior to the air emission control equipment being installed at the Site.

Building	Flat roof size in square feet	Estimated saturated material in cubic yards (cy)
North Mill Building	38,000	630
South Mill Building	510	5
Waste Water Treatment	2,000	20
Cooling Water Pumphouse	2,000	20

Flat roof sizes and dust quantities:

Due to the saturated condition of the dust, it cannot be bagged in the same manner as the dust inside the buildings. However, in the spirit of cooperation, and in accordance with the AOC policy, CAMC would like to remove the dust from the roofs in its current slurry form (like a thick paint) and move it to the area denoted on the attached figure and allow it to dry. This area is very near the "Gary Smith" piles that were allegedly managed by the prior site owner. The area is a depression that currently consists of slag and is already bermed by natural slopes on three sides. CAMC is proposing to use on-site material to complete the berm around the area, which will facilitate surface water management in the area while the dust dries. CAMC has measured the area and it is capable of holding approximately 1,000 cubic yards prior to any construction. OEPA has asked if the saturated dust contained asbestos or chromium and if the previously conducted Site studies would be applicable to the material. The roofs were recently accessed to assess the presence of asbestos containing building materials. In the five building roofs surveyed, the only asbestos containing material found was in the outside edge flashing of the South Mill Building. Therefore, it is highly unlikely that the dust contains asbestos. Regarding chromium content, it is expected that chromium could be present. However, long-term, CAMC proposes to include the material and the storage area in the RI/FS investigation to be completed pursuant to the COPI. Thereafter, the area will be addressed in connection with the implementation of the remedy that is ultimately selected for the Site

Describe the operation of dust removal.

CAMC's contactor will use a combination of high lifts and a crane to move workers, tools, supplies and small equipment onto the roofs. The contractor is currently looking to use a small "Dingo" track loader to help move the saturated dust into a chute that will be

Erik Hagen Page 3

set on the edge of the roof. The chute will be set so that the material can be loaded into a dump truck.

How the material will be transported;.

A JCB 714 Articulated 10 cubic yard dump truck (picture attached) will pull underneath the chute to load approximately 6-8 cubic yards at a time into the truck bed. The truck will then travel to the designated deposit area, drive over an ingress berm, back up to a marked location to drop the saturated dust into the depressed area, egress out at the marked exit route and then return back to the chute for its next load.

How the depositional site will be prepared (i.e. surface modification soil and berming).

An area to the south of the "Gary Smith" piles has been identified as a natural depression area to receive the saturated dust. A small amount of earthwork will be needed to smooth the containment area and build a dump curb/berm to facilitate a safe stopping point for the truck when backing up and provide protection from the backsplash on the truck tires when the dust is being dumped from the truck. This will minimize the decontamination work necessary on the truck before it leaves the deposit area to return to the drop chute.

How the material will be deposited into the bermed area.

An elevated access road will be constructed on one side above the depressed area so the truck will never drive through the saturated dust. Material will be deposited into the bermed area by end dumping. End dumping will occur in a few places along the access road. As the truck dumps the 6-8 cubic yard loads into the depressed area, the low viscosity of the saturated dust will cause the area to slowly fill.

Describe how the surface water monitoring sampling network is adequate to demonstrate that this source area will not pose threat from runoff.

The area has a natural depression on three sides and most of the water flow to the depression comes from the hillside on the west. Using an excavator, the plan is to construct a diversion berm on the hillside above the depression to divert runoff from the hill from coming into the dust deposit area. Once all the dust has been deposited, the entrance or ingress berm will be built up further to create more free board and stormwater storage capacity for precipitation that falls directly onto the area. When the final berming (reference figure 1 – containment berm) is completed it is estimated this area could hold an additional 1,400 cubic yards of rainfall on top of the dust (i.e. 2 times the volume of the estimated dust to be stored there).

In light of the foregoing, CAMC respectfully requests your approval to address the saturated dust on the roofs of the buildings at the Site in the manner outlined above, and requests confirmation that the Interim Action Work Plan for the Site is deemed to be amended in order to incorporate the additional Work outlined in this letter. Because

CAMC would like to proceed with the collection of the dust at the earliest convenience, your prompt response to this request would be greatly appreciated.

To the extent that CAMC identifies any additional Work that needs to be incorporated into the Interim Action Work Plan in this matter, it will submit further proposals to amend the Interim Action Work Plan for the project pursuant to Sections VI and XII of the COPI.

Thank you in advance for your consideration of this request.

Sincerely,

Burbara KA!

Barbara K. Nielsen Manager, Remediation Projects

Cc: James D Lynch Shane Farolino Lee Holder Soren Suver Joe Brunner