



August 22, 2013

Project No. 123-93309.200

Mr. Erik Hagen  
Ohio EPA-DERR  
50 West Town Street, Suite 700  
Columbus, Ohio 43215

**RE: ADDENDUM NO. 1 TO THE PRELIMINARY EVALUATION REPORT AND REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORKPLAN FOR THE FORMER SATRALLOY SITE**

Dear Mr. Hagen:

On behalf of Cyprus Amax Minerals Company (Cyprus), this letter proposes Addendum No. 1 to the Preliminary Evaluation Report and Remedial Investigation/Feasibility Study Workplan for the Former Satralloy Site (RI/FS Workplan) approved by the Ohio Environmental Protection Agency (OEPA).

As you are aware, OEPA issued a letter from Michael Sherron to Barbara Nielsen dated October 19, 2012 (Attachment A) regarding the designation of an Area of Contamination (AOC) at the Former Satralloy Site (Site). The letter states: "In this case, we have concluded that a properly designated AOC would be identified by Cyprus and submitted as part of a plan (e.g., IA Work Plan, RI/FS Work Plan) pursuant to the COPI, which would specify the work to be performed and how the AOC would be employed. Upon approval of the Agency, the plan would be implemented, and the designated AOC would apply." The appropriate AOC language was incorporated into the Interim Action (IA) Workplan, found in Attachment B for reference. We propose similar language in Attachment C of this letter for the RI/FS Workplan. Attachment C specifies the work to be performed and how the AOC will be implemented for RI/FS activities. We request formal OEPA approval of the AOC for these activities, and that Attachment C be incorporated into the RI/FS Workplan as Addendum No. 1.

Sincerely,

**GOLDER ASSOCIATES INC.**

A handwritten signature in blue ink, appearing to read 'Lee K. Holder', is written over the printed name.

Lee K. Holder, PE  
Associate Engineer, Project Manager

cc: Barbara Nielsen, Cyprus Amax Minerals Company  
J. Stanton Curry, Gallagher & Kennedy, P.A.  
James D. Lynch, Gallagher & Kennedy, P.A.

**Attachments:**

Attachment A OEPA Letter Dated October 19, 2012  
Attachment B AOC Policy and Director's Exemption IA Workplan  
Attachment C Addendum No. 1 to the Preliminary Evaluation Report and RI/FS Study Workplan

LKH/cb

ri-fs aoc letter to oepe.docx

**Golder Associates Inc.**  
18300 NE Union Hill Road, Suite 200  
Redmond, WA 98052 USA  
Tel: (425) 883-0777 Fax: (425) 882-5498 [www.golder.com](http://www.golder.com)

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**ATTACHMENT A**



Environmental  
Protection Agency

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

October 19, 2012

**JEFFERSON COUNTY  
SATRALLOY  
CORRESPONDENCE FILE**

Ms. Barbara Nielsen  
Manager, Remediation Division  
Freeport-McMoRan Copper & Gold, Inc.  
On behalf of Cyprus Amax Minerals Company  
333 N. Central Avenue  
Phoenix, AZ 85004

**Re: Designation of an Area of Contamination (AOC)  
Former Satralloy Site  
County Road 74, Cross Creek Township, Jefferson County, Ohio**

Ms. Nielsen:

This letter follows our August 23, 2012, letter with comments on the April 26, 2012, draft Interim Action (IA) Work Plan, and our September 25, 2012, meeting to discuss application of U.S. EPA's Area of Contamination (AOC) Policy at the Former Satralloy Site (Site). Cyprus Amax Minerals Company (Cyprus) has requested that Ohio EPA designate the entire Site (as the term "Site" is defined in the Consent Order for Preliminary Injunction (COPI)) as an AOC, and provided visual (e.g., "9/16/12" photographs) and technical evidence (e.g., "9/18/2012" Figure 1-1 "Lowlands") of contiguous Site-wide contamination to support this request.

I have consulted with staff in Ohio EPA's Office of Legal Services and Ohio EPA DERR's Central Office, including Assistant Chief Pete Whitehouse, and this letter is consistent with those discussions. Ohio EPA acknowledges that Cyprus has demonstrated that contamination appears to be present across the Site in the continuous and contiguous fashion that designation of the AOC requires, and thus we conclude that the AOC concept is applicable. In the event that Cyprus is able to demonstrate in the future, to the satisfaction of Ohio EPA, that continuous and contiguous contamination is present in additional locations on or off the Satralloy property, the Agency acknowledges that the AOC concept would be applicable to such areas as well.

In our view, when an AOC is designated in the context of a government overseen cleanup action, the delineation of AOC is reviewed, overseen and approved as part of that action. In most cases, the AOC is designated in a remedy decision, allowing certain remedial actions to proceed in a specified area without triggering RCRA hazardous waste requirements, including land disposal restriction requirements (LDRs).

In this case, we have concluded that a properly designated AOC would be identified by Cyprus and submitted as part of a plan (e.g. IA Work Plan, RI/FS Work Plan) pursuant to the COPI, which would specify the work to be performed and how the AOC would be

employed. Upon approval of the Agency, the plan would be implemented, and the designated AOC would apply.

We hope this letter clarifies Ohio EPA's position regarding application of the AOC concept at the Satralloy Site. We think this concept can be most useful across the entire Site, as noted above.

Given that the next deliverable under the COPI, the IA Work Plan, was held up pending the clarifications requested in this letter, you are now requested pursuant to paragraphs 12 and 13 of the COPI to submit the Final IA Work Plan with 30 days of receipt of this letter. If you have any questions, or require clarification, please feel free to contact me at your convenience.

Sincerely,



Michael D. Sherron  
Site Coordinator

[Michael.Sherron@epa.state.oh.us](mailto:Michael.Sherron@epa.state.oh.us)  
740-380-5251

ec: John Rochotte, DERR-SEDO  
Melody Stewart, DMWM-SEDO  
Pete Whitehouse, DERR-CO  
Mark Rickrich, DERR-CO  
Ed Lim, DERR-CO  
Mark Navarre, Legal  
Todd Anderson, Legal

**ATTACHMENT B**

**AREA OF CONTAMINATION POLICY AND  
DIRECTOR'S EXEMPTION INTERIM ACTION WORKPLAN FOR THE  
FORMER SATRALLOY SITE<sup>1</sup>**

Other than the actively managed piles addressed in Section 1.2.2, the other mineral by-products and wastes at the Site would not be regulated under RCRA if there never were any active management of them in the future. However, the contemplated interim actions and future remediation of the Site could be sufficiently extensive to constitute active management for purposes of triggering future regulation under RCRA, but for the application of the U.S. EPA Area of Contamination (AOC) policy under RCRA, which interprets certain activities as not constituting generation or active management,<sup>2</sup> and the issuance by the Director of the OEPA of an exemption under Section 3734.02(G) of the Ohio Revised Code ("02(G) Exemption"). The AOC policy and the 02(G) Exemption are designed to facilitate and encourage remediation, such as that contemplated for the Site.

Site investigation and remediation activities involving the former Bevill-exempt materials referenced above and/or any other materials at the Site, including interim actions under this workplan, and any remediation to be conducted in the future, will be performed in accordance with the AOC policy pursuant to the letter from Michael Sherron to Barbara Nielsen dated October 19, 2012 (Appendix A). Specifically, this letter stated: "Ohio EPA acknowledges that Cyprus has demonstrated that contamination appears to be present across the Site in the continuous and contiguous fashion that designation of the AOC requires, and thus we conclude that the AOC concept is applicable." The letter further stated: "In the event that Cyprus is able to demonstrate in the future, to the satisfaction of Ohio EPA, that continuous and contiguous contamination is present in additional locations on or off the Satralloy property, the Agency acknowledges that the AOC concept would be applicable to such areas as well." As discussed during the September 25, 2012 meeting between the parties, and as set forth in the Preliminary Evaluation Report and Remedial Investigation/Feasibility Study Workplan for the Former Satralloy Site, Cyprus Amax has documented that continuous and contiguous contamination is present across the Site and in a certain off-property areas, including areas where slag piles extend beyond the property boundary and the rail spur area at the facility. This IA Workplan outlines the activities that Cyprus Amax plans to conduct in those areas. Because it has already been demonstrated that continuous and contiguous contamination is present in the areas in question, all of the activities to be conducted pursuant to this IA Workplan will be performed in accordance with the AOC policy, consistent with the above-referenced letter.

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<sup>1</sup> Interim Action Workplan for the Former Satralloy Site, Jefferson County, Ohio, Section 1.2.3, p 2 (Nov. 15, 2012).

<sup>2</sup> It is Cyprus' view that the AOC policy alone is legally sufficient to allow the on-site management of the former Bevill materials, without the need for the 02(G) Exemption. Nevertheless, Cyprus is agreeable to obtaining an 02(G) Exemption, without waiving its position that the AOC policy is applicable and sufficient.

In addition, Cyprus Amax will obtain a 02(G) Exemption from the Director prior to managing any materials at the Site that exhibit the Toxicity Characteristic under this IA Workplan. The 02(G) Exemption will allow Cyprus Amax to manage on-Site the piles addressed in Section 1.2.2 (until any piles exhibiting the Toxicity Characteristic are sent off-Site for disposal) and all of the mineral processing materials that were previously covered by the Bevill exclusion at the time they were generated at the Site, without subjecting such management to regulation under RCRA and the regulations promulgated thereunder. The 02(G) Exemption will not apply to the extent that any of the piles addressed in Section 1.2.2 or former Bevill-exempt materials are sent off-Site for disposal or other off-Site management.

**ATTACHMENT C**



**ADDENDUM NO. 1 TO THE PRELIMINARY EVALUATION REPORT AND  
REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORKPLAN FOR THE  
FORMER SATRALLOY SITE**

Other than the actively managed piles addressed in Section 1.2.2 of the IA Workplan, the other mineral by-products and wastes at the Site would not be regulated under RCRA if there never were any active management of them in the future. However, the contemplated RI/FS actions and future remediation of the Site could be sufficiently extensive to constitute active management for purposes of triggering future regulation under RCRA, but for the application of the U.S. EPA Area of Contamination (AOC) policy under RCRA, which interprets certain activities as not constituting generation or active management,<sup>1</sup> and the issuance by the Director of the OEPA of an exemption under Section 3734.02(G) of the Ohio Revised Code ("02(G) Exemption"). The AOC policy and the 02(G) Exemption are designed to facilitate and encourage remediation, such as that contemplated for the Site.

Site investigation and remediation activities involving the former Bevill-exempt materials referenced above and/or any other materials at the Site, including RI/FS actions under this workplan, and any remediation to be conducted in the future, will be performed in accordance with the AOC policy pursuant to the letter from Michael Sherron to Barbara Nielsen dated October 19, 2012 (Appendix A of the IA Workplan). Specifically, this letter stated: "Ohio EPA acknowledges that Cyprus has demonstrated that contamination appears to be present across the Site in the continuous and contiguous fashion that designation of the AOC requires, and thus we conclude that the AOC concept is applicable." The letter further stated: "In the event that Cyprus is able to demonstrate in the future, to the satisfaction of Ohio EPA, that continuous and contiguous contamination is present in additional locations on or off the Satralloy property, the Agency acknowledges that the AOC concept would be applicable to such areas as well." As discussed during the September 25, 2012 meeting between the parties, and as set forth in the Preliminary Evaluation Report and Remedial Investigation/Feasibility Study Workplan for the Former Satralloy Site, Cyprus Amax has documented that continuous and contiguous contamination is present across the Site and in a certain off-property areas, including areas where slag piles extend beyond the property boundary and the rail spur area at the facility. This RI/FS Workplan outlines the activities that Cyprus Amax plans to conduct in those areas. Because it has already been demonstrated that continuous and contiguous contamination is present in the areas in question, all of the activities to be conducted pursuant to this RI/FS Workplan will be performed in accordance with the AOC policy, consistent with the above-referenced letter.

In addition, Cyprus Amax has obtained a 02(G) Exemption from the Director prior to managing any materials at the Site that exhibit the Toxicity Characteristic under this RI/FS Workplan. The 02(G)

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<sup>1</sup> It is Cyprus' view that the AOC policy alone is legally sufficient to allow the on-site management of the former Bevill materials, without the need for the 02(G) Exemption. Nevertheless, Cyprus is agreeable to obtaining an 02(G) Exemption, without waiving its position that the AOC policy is applicable and sufficient.

Exemption will allow Cyprus Amax to manage on-Site the piles addressed in Section 1.2.2 of the IA Workplan (until any piles exhibiting the Toxicity Characteristic are sent off-Site for disposal) and all of the mineral processing materials that were previously covered by the Bevill exclusion at the time they were generated at the Site, without subjecting such management to regulation under RCRA and the regulations promulgated thereunder. The 02(G) Exemption will not apply to the extent that any of the piles addressed in Section 1.2.2 or former Bevill-exempt materials are sent off-Site for disposal or other off-Site management.