United States of America v. Magnesium Corp. of America, et al.
Case No. 2:01CV0040B
Consent Decree

Appendix No. 7

Electrolytic Ducon Scrubber and Sump Plan

APPENDIX 7

ELECTROLYTIC DUCON SCRUBBER AND SUMP PLAN

This Appendix describes the procedures to decommission and remove the Ducon scrubber and sump. The Ducon scrubber and sump decommissioning will be completed in accordance with the Project Compliance Schedule (Appendix 14 of the Consent Decree).

The Ducon scrubber and sump are located in the Courtyard between electrolytic Cell Buildings 2 and 3, as described in Appendix 5 (Courtyard Capping Plan). The Ducon scrubber is an approximately 200 cubic foot fiberglass vessel and the sump is an approximately 3,000-gallon rubber-lined in-ground tank. The Ducon scrubber and sump have not been in operation for over ten years, but formerly the Ducon scrubber treated anode (primarily chlorine) gas from the electrolytic cells and the sump collected Ducon scrubber liquor for recirculation to the scrubber and blowdown of spent liquor. The Ducon scrubber is currently empty and the scrubber and sump only transfer Electrolytic Building 4 (when operating) off-gas quench water, through the in-ground sump which is pumped and combined with the off-gas scrubber streams from Electrolytic Buildings 1, 2 and 3. USM will engineer and install a piping and pumping system to route the Building 4 quench water around the Ducon scrubber and sump prior to the actions described below.

The tasks and sequence for removal of visible residual wastewaters and solids from the scrubber and/or sump, and removal of the equipment from its current location will include:

> USM will conduct an initial visual inspection of the interior of the Ducon scrubber and sump to identify any residual waste material in the vessel and sump. Any residual wastewater remaining in the scrubber and/or sump will be pumped out into containers (drums or totes), characterized and managed in accordance with RCRA regulations. Any solid residue will be removed and containerized, characterized and managed in accordance with RCRA regulations.
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> The interior surface of the scrubber vessel and sump will be visually examined to determine if the surface is free of visible solids or other surficial residue. Free of visible solids or other surficial residue means that the surface, when viewed without magnification, is free of visible solids or other surficial residue with the exception of staining from wastewater, consisting of light shadows, slight streaks, or minor discoloration. Residual solids in cracks, crevices, and pits may be present, provided that such residual solids in cracks, crevices, and pits will be limited to no more than 5% of surface area.

If the interior surface area of the scrubber and/or sump is not free of visible solids or other surficial residue, the interior surface of the scrubber and/or sump will be pressure-washed with water to remove the solids and/or other residues. The pressure-wash water will be pumped out into containers (drums or totes) and managed in accordance with RCRA regulations.

If the interior of the tank is pressure-washed, the interior surface of the scrubber and/or sump will be visually re-inspected to confirm that the interior surface(s) are clean. Upon determination that the scrubber and sump are clean, photographs will be taken of the entire inner surface of the scrubber and sump to document that the decommissioning has been completed.

After completion of the decommissioning work, the sump and ancillary equipment will be removed. Clean borrow soil will be used to backfill the excavation level to the surrounding grade in anticipation of performing the Courtyard Capping in accordance with Appendix 5 of the Consent Decree.

The Ducon scrubber, sump and ancillary equipment will be relocated to an equipment storage area at the plant for potential future use or will be crushed and disposed in accordance with RCRA regulations.

Prior to being returned to any service, the scrubber and/or sump, including the scrubber ductwork and sump rubber lining, will be evaluated to ensure they are in good working condition in accordance with good engineering practice consistent with their intended use.

USM will submit to EPA a Completion Report in accordance with the Project Compliance Schedule (Appendix 14 of the Consent Decree). The Completion Report will include at a minimum: (1) a description of the tasks undertaken to complete the project including references to project documentation (e.g., photographs, tabulated data, drawings), (2) updated drawings, if applicable, (3) project photographs with captions, and (4) field test and hazardous waste determination documentation for project-generated waste as applicable. The Completion Report will include a certification of truth, accuracy, and completeness by the Project Coordinator in accordance with Paragraph 64 of the Consent Decree.