WESTERN ZIRCONIUM PROJECT

FUGITIVE DUST CONTROL PLAN



W.W. Clyde & Co. Revised: 04/08/12

Revision No: 001



Revision Log

Revision Number	Sections Changed	Reasons for Revisions	Date	Revision Approved By



I INTRODUCTION

This Fugitive Dust Control Plan (FDCP) describes the procedures implemented by W. W. Clyde & Co. Products (WWC) to minimize fugitive dust emission from WWC operations. Implementation of an effective FDCP has been selected per the Dust Minimization Section of the Temporary Relocation Permit Application. This FDCP replaces and/or supersedes corresponding requirements in applicable AOs and previous FDCPs.

Applicable state and federal regulations set opacity limits for aggregate processing. WWC has demonstrated that the methods previously used in conjunction with the equipment in this TRP Application are effective at controlling fugitive dust and maintaining compliance with the above mentioned regulations.

The application of water is the primary fugitive dust control measure employed at the Facility. Potential sources of fugitive dust are wetted to control fugitive dust to. Personnel visually monitor the operations and implement control measures to control fugitive dust as necessary. WWC procedures and guidelines dictate the application liberal quantities of water to sources of fugitive dust whenever a visible plume rises approximately more than four feet (4') above the point of generation and persists. WWC has demonstrated this approach to be effective in controlling fugitive dust emissions of PM₁₀ and preclude generation of excessive opacity.

Water is most commonly applied to roads, storage piles, and operational areas using a watering truck. Trucks usually begin as they enter a location, meaning a WWC facility and apply water in a systematic pattern to suppress dust to all applicable areas. In addition, before or after a complete pass through a facility, additional applications of water may be "spot applied" to any areas; as determined by facility personnel.

The general procedure for watering roads, storage piles, and other operational areas is to apply water beginning at one area within a location (facility) and proceed through the facility continuing to apply water to all appropriate areas until all applicable areas within the facility received an application of water or other control material.

Since the procedure is to apply water to all applicable areas within a facility the identification of specific areas with a facility is not necessary. The term location is used to differentiate between separate WWC facilities or construction sites.

If there are specific areas within a plant that become difficult to water adequately with a watering truck WWC at its discretion may elect to install fix or mobile sprinklers of water cannons. Some of the specific areas that may be watered by sprinklers or cannons for example are; storage piles, sections of roads, congested process areas etc.

The fugitive dust emissions from conveyor transfers and drop points, crushing and screening operations, and material loading/handling are controlled per the applicable Approval Order conditions, by sprinklers located at each drop point and at each crusher.

II FUGITIVE DUST CONTROL PROCEDURES:

All unpaved and unpaved roads, storage piles, exposed/disturbed areas shall be treated with water as the first level of dust control. Water will be applied to the affected areas in sufficient quantities and frequencies to ensure that fugitive dust emissions are controlled to or below permitted levels.



If water application does not control fugitive dust emissions to or below permitted levels, chemical treatments will be applied were applicable in lieu of water to produce the desired controls. This may be conducted in conjunction with traffic controls and/or traffic reduction measures.

When exposed/disturbed areas have been sufficiently watered and then left undisturbed crusting can occur. Crusting, ideally reduces fugitive dust emissions to below permitted limits. Whenever possible exposed/disturbed areas will be left undisturbed to maintain the dust suppressing crust.

WWC uses meteorological conditions to evaluated and assess the impact to operations at the facility. When practical operation can be adjusted to help minimize the impact of adverse meteorological condition at the facility.

Some of the measures the WWC evaluates and implements, at its discretion, are:

- Distances traveled on unpaved roads are minimized when practical
- Temporary reduction in speed limits
- Roads are graded, compacted, and chemically treated when practical

III RECORDS

All records specified in this FDCP shall be maintained for a period of two years. These records shall be made available to the Executive Secretary upon request.

The following are information is recorded and retained by WWC personnel:

- Location, meaning which WWC Facility.
- Date and time.
- Quantity of water applied.
- Weather conditions, (i.e., precipitation (yes/no), temperature above/below freezing, high winds (yes/no).
- Chemical treatment made if applied, dilution ratio, and quantity.