

US EPA ARCHIVE DOCUMENT

UNITED STATES  
ENVIRONMENTAL PROTECTION  
AGENCY-REGION 7  
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 7  
901 NORTH 5<sup>TH</sup> STREET  
KANSAS CITY, KANSAS 66101

IN THE MATTER OF: )

The Doe Run Transportation and Haul Routes )  
Southeastern Missouri )

THE DOE RUN RESOURCES CORPORATION )

Respondent. )

Proceedings under Section 7003 of the )  
Resource Conservation and Recovery Act, )  
42 U.S.C. § 6900, et seq., as amended. )

Docket No. RCRA-07-2007-0008

MODIFICATION OF  
ADMINISTRATIVE ORDER ON CONSENT

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REGION 7  
KANSAS CITY, KANSAS 66101

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I. INTRODUCTION

The following sections of the Administrative Order on Consent (“Order” or “AOC”) are being modified in order to enhance the effectiveness of the Work being performed by the Doe Run Resources Corporation, (“Respondent” or “Doe Run”) under the Order. The modification is entered into voluntarily by the United States Environmental Protection Agency (“EPA”) and Respondent. All Paragraphs or subparagraphs not included in this Modification shall remain as drafted in the original AOC, with two exceptions. The Public Comment and Effective Date Paragraphs at the end of this Modification are intended for this Modification only.

13. Unless otherwise expressly provided herein, terms used in this AOC that are defined in the RCRA statute shall have the meaning assigned to them in that statute. Whenever the terms listed below are used in this AOC the following definitions apply:

“Concentrate” or “Lead-bearing Concentrate” shall mean ore that has been processed at the mill concentrate facilities, and includes lead concentrate, zinc concentrate, and copper concentrate.

"Doe Run Facilities" shall mean Doe Run owned and/or operated mines, mills, concentrators, smelters, and other facilities located in southeastern Missouri where concentrate, ore, or lead-bearing materials are transferred on or off vehicles, including, but not limited to the Buick mine and mill, Brushy Creek mine and mill, Fletcher mine and mill, Sweetwater mine and mill, #35 Mine, and #29 Mine; the Glover Smelter located at Highway 49 North in Annapolis, Iron County, Missouri; the Herculanum Smelter located at 881 Main Street in Herculanum, Jefferson County, Missouri. For purposes of describing obligations at various facilities pursuant to this AOC, the term "Doe Run facilities" shall also include Doe Run's concentrate handling and transportation activities at the SEMO Port located in Scott City, Scott County, Missouri. Respondent is electing to cease smelting operations of and delivery of lead concentrate to the Herculanum Smelter by December 31, 2013. If Respondent begins transport of lead concentrate to a new Doe Run owned and/or operated facility in Missouri that facility shall be included in the term "Doe Run facilities." In addition, if Respondent begins transport of lead concentrate to a new facility at the former Herculanum Smelter after ceasing smelting operations, that facility shall be included in the term "Doe Run facilities," whether or not the facility that receives the lead concentrate is owned and/or operated by Doe Run.

60. Project Coordinators. Project Coordinators for Respondent and EPA are as follows:

For Respondent: Calvin R. Keller  
Environmental Manager Primary Smelting  
The Doe Run Company  
881 Main Street  
Herculanum, MO 63048  
(636) 933-3143

and

John E. Carter, P.E., R.G.  
Environmental Manager  
Southeast Missouri Mining and Milling Operations  
P.O. Box 500  
35 Iron County Road #1  
Viburnum, MO 65566  
(573) 244-8152

For EPA: Jim Aycock  
Waste Enforcement and Materials Management  
U.S. EPA, Region 7  
901 N. 5<sup>th</sup> Street  
Kansas City, KS 66101  
(913) 551-7887



Respondent shall direct all submissions required by this AOC to EPA's Project Coordinator. Copies of all submissions required by this AOC shall be sent to Mr. Tom Judge, Missouri Department of Natural Resources, Hazardous Waste Program, P.O. Box 176, Jefferson City, Missouri 65102-0176. Each Project Coordinator shall be responsible for overseeing the implementation of this AOC. EPA and Respondent have the right to change their respective Project Coordinators. The other party must be notified in writing at least ten (10) days prior to the change. EPA retains the right to disapprove of any Project Coordinator named by Respondent. If EPA disapproves of a selected Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name and qualifications within two (2) working days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this AOC shall constitute receipt by Respondent.

a. Transportation Compliance Managers. By five (5) days after the Effective Date of the Modification, Respondent shall identify a Transportation Compliance Manager ("TCM") to be responsible for overseeing all of the compliance issues associated with the transportation of lead-bearing materials as identified in this Order. In addition, the Respondent shall identify a TCM for each facility covered by this Order. The facility-specific TCM shall be someone who is very familiar with the operations at that facility. In addition to compliance responsibilities at their specific facility, the facility-specific TCM shall be responsible for ensuring that people who conduct any portion of the Work under this Order at their specific facility shall be appropriately trained. The facility-specific TCM shall be limited to overseeing only one facility, except at the mine or mill facilities where a facility-specific TCM may oversee multiple facilities with similar operations that are in relatively close proximity to one another.

b. Training. Respondent shall develop and implement an annual training program for any person who conducts Work under this Order at any facility covered by this Order. The training shall include information on the requirements of this Order, including its attached SOPs. By five (5) days after the Effective Date of the Modification, Respondent shall submit the written training materials to EPA for review, and Respondent shall commence implementation of the training program unless and until EPA requests revisions to the training program. All persons conducting Work under this Order shall be trained within thirty (30) days of the Effective Date of the Modification, and annually thereafter; all new persons hired after that initial training date shall be trained prior to performing any Work. Persons subject to training shall include TCMs, truck drivers, inspectors, truck wash operators and other appropriate personnel that perform Work under this Order.

c. Audits. Respondent shall retain an independent third-party environmental contractor to perform audits of its compliance with the provisions of this Order and its SOPs. By five (5) days after the Effective Date of the Modification Respondent shall provide to EPA the name and qualifications of the environmental contractor that Doe Run would propose to retain for performing audits. EPA retains the right to disapprove of the contractor selected by



Respondent. If EPA disapproves of Respondent's selection, Respondent shall propose a different party to perform the audits and shall notify EPA of the name and qualifications of that party within thirty (30) working days of EPA's disapproval. If EPA fails to disapprove Respondent's proposed environmental contractor within thirty (30) days of receipt of notification of qualifications, Respondent's proposed environmental contractor shall be deemed approved, the contractor may be retained and the audit process may commence. Respondent shall provide the wash and inspection SOPs and related materials to the auditor for review, and Respondent shall present the standard training course to the auditor prior to commencement of the actual audits. A full independent third-party audit shall be conducted at each facility a minimum of once every year after an initial audit of each facility has been completed. The audit shall include a review to evaluate whether the inspections and washing of all lead-bearing vehicles at each of the vehicle wash stations are being conducted pursuant to the requirements of the Order and a report shall be prepared by the auditor and submitted to EPA and Respondent as set forth herein. Respondent shall submit an audit report form for approval by EPA within sixty (60) days of the Effective Date of the Modification, which includes, but is not limited to, the wash station being audited, the date and time of the audit, the name of the person conducting the audit, all of the provisions of the SOP for washing and inspecting trucks transporting lead-bearing material that will be audited, all deficiencies noted, recommended corrective actions, the Respondent official to whom the audit report was provided, and the date the audit report was provided to Respondent. The auditor's first report relating to the initial audit(s) shall be due ninety (90) days after EPA's approval of the auditor and audit report form. Subsequent quarterly audit reports shall be submitted within thirty (30) days after the end of each calendar quarter thereafter. The audit report shall contain a certification by the auditor similar to that found in paragraph 89 of this Order. The auditor shall conduct a full audit of two (2) or three (3) different facilities each quarter. The audits of each facility shall be random and unannounced, but may require some advance coordination with Respondent to ensure access and that certain facilities that are potentially subject to an audit will be operational on the potential audit dates.

61. Contractors. Respondent shall perform the Work itself, or retain one or more contractors to perform the Work. Should the Respondent elect to conduct the Work itself, it shall notify EPA of its qualifications to perform the Work within fourteen (14) days of the Effective Date of this AOC. Should Respondent retain a contractor to conduct the Work, Respondent shall notify EPA of the name and qualifications of each contractor within fourteen (14) days of the Effective Date of this AOC. Respondent shall also notify EPA of the name and qualifications of any other contractor or subcontractor retained to conduct any portion of the Work under this AOC at least two (2) days prior to commencement of such portion of the Work. EPA retains the right to disapprove of any party Respondent selects to conduct the Work. If EPA disapproves of Respondent's selection, Respondent shall propose a different party to perform the Work and shall notify EPA of the name and qualifications of that party within ten (10) working days of EPA's disapproval.

a. If Respondent contracts with trucking companies for transportation of lead-bearing materials, the contracts shall specify that the trucks which are currently providing transport



services for Respondent, and which are in good standing, shall be parked on the property of the Respondent or the contract trucking company, if feasible. If parking on Respondent's property or a contract trucking company's property is infeasible or unduly burdensome due to issues including, but not limited to, the distance from the driver's home to the respective commercial parking property or the location of the driver's truck maintenance equipment and servicing area, a truck may be parked at an individual residential property, provided the truck is parked in a designated area which is separate from the residential driveway, away from the residence and which is used solely for truck maintenance and/or parking.

b. Any employee of Respondent found to have violated the requirements of this Order including the attached SOPs must be subject to appropriate disciplinary action, up to and including permanent termination of employment. For any contractor or consultant found to have repeatedly violated the requirements of this Order, Doe Run shall notify the associated employer that the respective contractor or consultant shall not be allowed to conduct work for Respondent or to have access to Respondent's property, thereby effectively terminating that individual's service to Respondent.

65. Vehicle Wash Stations

a. Prior to commencing operation of a new facility, Respondent shall install and begin to operate enclosed vehicle wash stations at all Doe Run facilities where Concentrate, Ore, or lead-bearing materials are transferred on or off vehicles, and those vehicles enter/exit those facilities above ground. The vehicle wash stations shall be designed and built to be fully and safely operational during all seasons of the year, including freezing temperatures; provided, however, that during periods of extreme freezing temperatures (e.g., below 25° Fahrenheit), the schedule for washing Ore trucks may be suspended to minimize hazardous conditions, risks and property damage associated with excessive ice build-up from multiple, high-frequency washings. All vehicle wash stations shall be located at or near the exit of the facility property and have backup wash systems in the event that the primary wash systems are inoperative. Nothing in this AOC shall be construed to require construction of additional vehicle wash stations (except where Respondent begins operation of an additional smelter, mine, mill or concentrator).

b. All vehicle wash stations shall be designed to wash the vehicle's entire undercarriage, entire sides, backs and tailgates, tires and wheels. In the alternative, if the wash station is not designed to wash all of the components listed above, the operator shall wash those omitted components with a manually-operated pressure washer (rated at a minimum pressure of 2200 psi), and will visually inspect each truck and rewash any areas of visible contamination. After unloading Concentrate trucks, the interior of the trailer and bedliner will be washed out with a hose with force and volume sufficient to reach the top of the bed/bedliner on the raised trailer. The bed/bedliner wash-out shall be conducted at the unloading area. Bed/bedliner wash-out operations may be suspended during freezing temperatures. The bed/bedliner wash-out requirement shall not apply to trucks unloading and reloading lead-bearing concentrate at the

Glover Facility. Respondent shall implement the applicable actions in this sub-paragraph within thirty (30) days of the Effective Date of this Modification.

d. Wash water and other lead-containing material generated at the vehicle wash stations and wash-out areas shall be collected, treated, and discharged/disposed in accordance with all applicable state and federal requirements and permits.

e. Respondent has created two revised Standard Operating Procedures (“SOPs”), “Washing and Inspection of Trucks Transporting Concentrate” and “Washing/Inspection of Vehicles Transporting Ore or Lead-Bearing Materials,” which are attached to this Modification. These SOPs will be implemented on the Effective Date of the Modification.

66. Roadway and Street Cleaning.

a. At each Doe Run mine/mill facility, as well as at the Herculanum facility, Respondent shall thoroughly sweep with a regenerative air sweeper, or a device of comparable efficiency, all of the areas traveled by the Concentrate and Ore trucks leading from the exit side of the vehicle wash station to the exit of the facility at the juncture of the public highway or county road at least once each day. At Respondent's Glover and SEMO Port facilities, Respondent shall thoroughly sweep with a regenerative air sweeper, or a device of comparable efficiency, all of the areas traveled by the Concentrate trucks leading from the exit side of the vehicle wash station to the exit of the facility at the juncture of the public highway or county road at least once each week. In addition, the interior roads from the loading or unloading area to the wash station within the Respondent's facilities that are traveled by Concentrate trucks shall be swept at least once per week, except for the Herculanum facility that is subject to more frequent specific interior road cleaning under an existing Missouri Lead NAAQS SIP. During periods when freezing temperatures may form snow, ice or hazardous conditions, street cleaning operations may be suspended. Respondent shall implement the actions in this subparagraph within ninety (90) days after the Effective Date of the Modification.

67. Enclosure of Materials During Transit.

a. Within thirty (30) days of the Effective Date of this Modification, 100% of contract carrier trucks used to transport Concentrate, Ore, or lead-bearing materials generated at and transported to and from Doe Run facilities on public roadways and streets shall be equipped with high density polyethylene bedliners (except Ore trucks), seals on tailgates, permanently sealed grain doors (if grain doors exist on the truck), tail gate locks and tail gate security bolts (with wing nuts, if applicable).

c. Trucks transporting Concentrate, Ore or lead-bearing materials to and from Doe Run facilities shall be tarped while in transit on public streets and roadways, when they are loaded and when they are empty, unless removed from dedicated service as provided in subparagraph d. In addition, within one hundred-twenty (120) days of the Effective Date of this



Modification, all trucks transporting Concentrate shall be equipped with bonnets to reduce the air flow over the leading edge of the tarp.

69. Residential Property, Street and Road Edge Sampling and Transportation Study.

a. Beginning May 2007, and annually thereafter, Respondent shall sample the yard surface soil and interior dust of all occupied residential properties along the Concentrate, Ore, or lead-bearing material haul route(s) being utilized at the time of sampling in the Herculaneum city limits, for which Respondent or EPA secured access pursuant to Section XI. This sampling shall be conducted as long as Concentrate, Ore, or lead-bearing materials are being transported to and from Herculaneum, Missouri by vehicle transportation.

g. Respondent shall perform sampling at a minimum of twelve (12) residential properties along Concentrate or Ore haul routes leading from the Doe Run facilities. Within sixty (60) days of the Effective Date of this Modification, Respondent shall provide a list of at least twenty (20) residential properties located along the haul routes from the Doe Run facilities. EPA and Respondent will agree on twelve (12) residential properties representative of the residential yards located along Respondent's haul routes. Respondent shall provide a draft Quality Assurance Project Plan for the collection and analysis of these samples within ninety (90) days of the Effective Date of the Modification. After agreement on the properties to be sampled, Respondent shall attempt to obtain access to the residential properties as outlined in Section XI of this Order (Sampling, Access and Data Availability). Ninety (90) days after receiving approval from the respective property owner or EPA-approval of the QAPP, whichever date is later, Respondent shall collect and analyze one multi-aliquot soil sample from the mid-yard area of the twelve residential properties in the portion of the yard closest to the roadway. Respondent shall perform sampling and analysis at these twelve properties thereafter annually. The results of the respective sampling and analysis shall be provided to EPA in the monthly report required in Paragraph 70 following the receipt of the sampling assays for those properties.

h. Handling and Transportation Study. Respondent shall retain an independent third-party contractor to conduct a Concentrate Handling and Transportation System Engineering Study (CHTSES) to: (1) benchmark Respondent's current lead-bearing materials load, unload, transportation and monitoring operations, practices and planned improvements; (2) identify and evaluate current load, unload, transportation and monitoring operations and practices at other similar facilities that are in place to reduce the potential for releases at those facilities and their applicability to Respondent's operations; and (3) evaluate the effectiveness of and opportunities for improvement to the loading, unloading, transportation, and monitoring practices implemented under the Order to prevent releases of lead-bearing materials in off-site areas.

i. Respondent shall notify EPA of the name and qualifications of the lead consultant that will work on the CHTSES within ninety (120) days of the Effective Date of the Modification. Respondent shall also notify EPA of the name and qualifications of any other



contractor or subcontractor retained to conduct any portion of the Work under this Section at least two (2) days prior to commencement of such portion of the Work. EPA retains the right to disapprove the lead consultant selected by Respondent to conduct the Work. If EPA disapproves of Respondent's selection, Respondent shall propose a different lead consultant to perform the Work and shall notify EPA of the name and qualifications of that party within thirty (30) working days of EPA's disapproval. If EPA fails to disapprove Respondent's proposed lead consultant within thirty (30) days of receipt of notification of qualifications, Respondent's proposed lead consultant shall be deemed approved and the CHTSES process may commence.

ii. Respondent shall provide to EPA for review and approval a Work Plan and QAPP for the CHTSES within ninety (90) days of the approval of Respondent's contractor. Quarterly reports of progress of the CHTSES shall be provided to EPA. The first CHTSES quarterly progress report shall be completed by no later than one hundred-twenty (120) days after EPA's approval of the Work Plan and QAPP. A Final CHTSES Report shall be submitted to EPA no later than sixty (60) days after the completion of the CHTSES for review and approval.

iii. Within 30 days of approval of the Final CHTSES Report, the Respondent shall provide to EPA analysis and recommendations, if any, for improvements to the transportation and materials handling activities covered under this Order. The analysis shall include discussion on environmental benefits and costs of possible improvements referenced in the CHTSES. EPA and Respondent will meet to discuss Respondent's recommendations, if any. Any further modifications to the Order based on any recommendations made by Respondent shall be made pursuant to Section XXIII "Modification of This AOC" paragraph 141.

70. Monthly Monitoring Reporting

a. Within forty-five (45) days of the Effective Date of this AOC and by the 15<sup>th</sup> day of every calendar month thereafter, Respondent shall submit a monthly monitoring report (paper copy and electronic copy) for activities occurring during the previous month which includes, but is not limited to, analytical data collected pursuant to this AOC, along with corresponding times, dates, locations, vehicle tag numbers and companies; details of equipment failures at the vehicle wash stations and loading and unloading stations; schedules for repairs of broken equipment; details on any failures to clean haul route roadways and streets; details of any spill or leak incidents and the resulting cleanup; progress on construction of the vehicle wash stations; details on operation of the street sweeper; progress in decreasing the number of contract carrier trucks used for transporting concentrate, ore, or lead-bearing materials; and details on any changes to the mode of transportation of concentrate, ore, or lead-bearing materials by Respondent.

114. Stipulated Penalty Amounts.

a. A stipulated penalty of \$2,000 per violation per day shall accrue for any noncompliance identified below:

- i. Failure to submit any deliverables required by this AOC in a timely or adequate manner, other than submission of the monthly monitoring report.
- ii. Failure to perform surface, soil, interior dust, road/street, or wipe sampling as required by the AOC in a timely or adequate manner.
- iii. Failure to conduct roadway and street cleaning as required by this AOC in a timely or adequate manner.
- iv. Failure to implement and perform truck inspection and wash procedures in accordance with Paragraph 67.b and 65.e, respectively, in a timely and adequate manner; provided, however, that stipulated penalties shall not apply if this situation is necessitated by a reasonable deviation that is explained in writing on the inspection form.
- v. Failure to conduct audits pursuant to the time frames and conditions in paragraph 60.c.
- vi. Failure to conduct the Concentrate Handling and Transportation Study pursuant to the time frames and conditions in paragraph 69.h.
- b. A stipulated penalty of \$4,000 per violation per day shall accrue for any noncompliance identified below:
  - i. Failure to construct vehicle wash stations in accordance with Paragraph 65.a and b. in a timely and adequate manner.
- c. A stipulated penalty of \$1,500 per violation per day shall accrue for any noncompliance identified below:
  - i. Failure to submit a written monthly monitoring report in a timely or adequate manner.
  - ii. Any other violation of the AOC other than those milestones identified in 114.a, 114.b, 114.c, or 114.d.
- d. A stipulated penalty of \$10,000 per violation shall accrue for any noncompliance identified below:
  - i. Any truck driver obtaining a load of lead-bearing material in a truck that was previously rejected for "bad order" ("BO") defect(s) which were not corrected prior to obtaining another load of lead-bearing material.
  - ii. An observed release of lead-bearing material from a truck to publicly accessible streets, roads, residential yards or other areas located outside of Doe Run property. The term "observed release" means direct evidence of lead-bearing material discharged from a truck to publicly accessible streets, roads, residential yards or other areas located outside of Doe Run property. This term specifically excludes the following events and conditions: (a) truck accidents resulting in spills or discharges of lead-bearing materials (see Spill Response Plan paragraph 68 of AOC); (b) staining on the exterior of the trailer that has not resulted in a discharge or release of lead-bearing material from the truck to publicly accessible streets, roads, residential yards or other areas located outside of Doe Run property; and (3) sampling conducted pursuant to this Order or any other Unilateral Order or Administrative Order on Consent that indicates the presence of lead or other



metals with no direct or recorded evidence of a discharge of lead-bearing material from a truck hauling Respondent's lead-bearing materials.

## II. PUBLIC COMMENT


EPA shall provide public notice and a reasonable opportunity for public comment on the proposed Modification. After consideration of any comments submitted during a public comment period of not less than thirty (30) days (which EPA may extend), EPA may withhold consent or seek to amend all or part of this Modification, if EPA determines that comments received disclose facts or considerations which indicate that this Modification is inappropriate, improper, or inadequate.

## III. EFFECTIVE DATE

The effective date of this Modification shall be the date on which EPA signs the Modification, following public comment specified in Section II. The undersigned representative of Respondent certifies that s/he is fully authorized to enter into the terms and conditions of this Modification and to bind the Respondent to this document. Respondent agrees not to contest the validity or terms of this Modification, or the procedures underlying or relating to it in any action brought by the United States, including EPA, to enforce its terms or seek penalties for its violations. Respondent retains its rights to assert claims against any third parties with respect to this site.

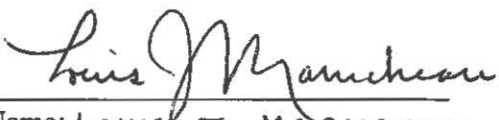


IT IS SO ORDERED AND AGREED.

  
Becky Webber  
Director  
Air, RCRA and Toxics Division  
United States Environmental Protection Agency  
Region 7

1-4-12  
Date


For The Doe Run Resources Corporation:

  
Name: LOUIS J. MARUCHEAN  
Title: VICE PRESIDENT LAW

1 SEP 10  
Date





 <b>STANDARD OPERATING PROCEDURE</b>	Code N°:
Washing and Inspection of Trucks Transporting Concentrate	Original Issue Date: 3/6/08
Approved by: Environmental Department	Date: Update Date: August 2010

### 1.0 Overview

Doe Run is committed to protecting human health and the environment. Effective wash and inspection procedures and Wash Stations require a team effort involving the participation and support of every Doe Run employee, contractor and consultant who deals with trucks loading or unloading lead-bearing concentrate ("Concentrate") at a Doe Run-owned or -operated facility. It is the responsibility of every user to understand this Standard Operating Procedure ("SOP"), and to conduct their activities accordingly.

### 2.0 Purpose

The purpose of this SOP is to outline the method of cleaning trucks at Doe Run's Missouri facilities where Concentrate is transferred onto or off of trucks, where the trucks enter/exit facilities above ground, and to define methods of backup due to mechanical failure at the Wash Station. This SOP is in place to protect human health and the environment.


### 3.0 Scope

This SOP applies to employees, contractors, consultants, and other workers at Doe Run's Missouri facilities, including affiliated third party personnel. This policy applies to all equipment that is used to handle and transport Concentrate over the public roads. Other vehicles that enter or cross an area within a Doe Run facility where Lead-Bearing Materials are handled or stored shall be washed and dried in the vehicle wash station prior to exiting the facility. Inspection forms will not be required for these other vehicles that are not transporting Concentrate, Ore or other Lead-Bearing materials to and from Doe Run facilities.

This SOP includes Appendices. Note Appendices may vary from site-to-site in order to enhance the training and lend insight to site-specific requirements. The purpose of the SOP is to provide consistency in the truck inspection and wash operations to allow for effective statistical process control. Any variation will be a result of very minor differences in configuration and location of wash stations and ancillary equipment (e.g., tanks, water valves, piping, power washer, etc.). While the specific physical conditions may be different from site to site, the basic objectives and standard requirements are identified and must be achieved at all facilities. Any material deviation must be set forth in a site-specific appendix and be both submitted and approved by the EPA. Although they may vary in content, each site will have the following appendices:

- ✓ Appendix 1 Pre-Operating Checklist for Wash Stations for Trucks Transporting Concentrate
- ✓ Appendix 2 Operating Guidelines – Inspection of Trucks at Concentrate Loading Stations
- ✓ Appendix 3 Operating Guidelines – Procedures for Wash Stations for Trucks Transporting Concentrate
- ✓ Appendix 4 Operating Guidelines – Inspection of Trucks at Concentrate Unloading Stations
- ✓ Appendix 5 Inspection Form for Trucks Transporting Concentrate

The following are covered by the policy:

 <b>STANDARD OPERATING PROCEDURE</b>	Code N°:
Washing and Inspection of Trucks Transporting Concentrate	Original Issue Date: 3/6/08
Approved by: Environmental Department	Date: Update Date: August 2010

- ✓ Every truck leaving a facility above ground after loading or unloading Concentrate.
- ✓ Every truck that enters or crosses an area within a Doe Run facility where lead-bearing materials are otherwise handled or stored.
- ✓ Wash Stations.
- ✓ Wash Station Operators.

#### 4.0 Inspection of Concentrate Trucks Before and After Loading and Unloading

Before receiving a load or unloading, Concentrate trucks must be inspected in accordance with either Appendix 2 Operating Guidelines – Inspection of Trucks at Concentrate Loading Stations ("Before Loading Trucks") or Appendix 4 Operating Guidelines – Inspection of Trucks at Unloading Station ("Before Unloading Trucks"), as applicable. Once loaded or unloaded, the Concentrate trucks must be inspected in accordance with either Appendix 2 Operating Guidelines – Inspection of Trucks at Concentrate Loading Stations ("After Loading Trucks") or Appendix 4 Operating Guidelines – Inspection of Trucks at Unloading Station ("After Unloading Trucks"), as applicable. After inspection, the truck may proceed to the Wash Station.

#### 5.0 Operating Policies

Only Certified Operators are to operate the Wash Station. Certification is based on:

- ✓ Demonstrated understanding of the SOP, training manual, safety practices, inspection practices.
- ✓ Hands on training performed by a certified trainer for both the automatic wash system and the power washer.
- ✓ A written test will be administered to verify training.

Automatic Facility Design Requirements:

Shall be enclosed.

Shall be designed to fully and safely operate during all seasons of the year.

Shall be located at or near the exit of the facility property.

Shall have backup wash systems as described in Section 5.3.

The Design will be to wash: undercarriages, entire sides, back, tailgates, tires, mud flaps, wheel wells and wheels.

- ✓ The facility will have the necessary equipment such as spray nozzles, power wash rated at a minimum 2200 psi, etc., at appropriate location, position and angle such that baseline performance is met or exceeded. These parameters will be inspected and recorded on a regular basis a part of the Pre-Operating Checklist for Wash Stations for Trucks Transporting Concentrate (Appendix 1).
  - During the pre-operating check the Operator will check the aim and integrity of the nozzles to assure the Wash Station is in optimum operating condition.
  - Water flow and recharge rates and pressures will vary upon facility design and available resources and will meet or exceed performance of baseline measurements taken at Herculeaneum during the 1000-truck baseline sample.
  - Water will be sampled once per month to check for lead content.
- ✓ Wash Water will be collected, treated and discharged in accordance with all state and federal requirements and permits.



**Washing and Inspection of Trucks Transporting Concentrate**

Original Issue Date:  
3/6/08

Approved by:  
Environmental Department

Date:

Update Date:  
August 2010

**5.1 Before Operation of Wash Station for Concentrate Trucks**

The following procedures will be performed/followed at the beginning of each day shift, in accordance with Appendix 1 Pre-Operating Checklist for Wash Stations for Trucks Transporting Concentrate.

1. Start-up Wash Station.
2. Run a wash cycle empty with no truck present.
3. Operator must complete a pre-operating checklist of the facility.
4. The pre-operating checklist is to be turned into the supervisor and kept on file for 10 years.
5. The supervisor will forward requests for corrective action to the maintenance department.
6. If Wash Station is deemed inoperable during or after the pre-operating inspection, see Section 5.3 for alternative washing techniques.
7. After Corrective Action is complete, a record will be placed into the file.

**5.2 Operation of Wash Station**

1. Truck pulls up to the entrance of the Wash Station and waits for signal to enter. A stop/go light system will be employed at facilities in conjunction with the attendant to signal allowed movements.
2. Operator must make sure truck is properly lined up with Wash Station. Failure to do so could result in damage to truck and facility.
3. Operator will grant entry to Wash Station only when system has sufficient water to run an entire cycle without disruption of water flow or pressure.
4. When entry is granted, wash cycle will automatically start, 5 mph is the maximum speed limit (as posted), and Operator shall control truck speed to ensure adequate wash and dry cycle retention times. Driver will move truck forward, pause and stop as directed by Operator based on the condition of the truck and the phases of the automatic and manual power wash cycles and the dry cycle.
5. The truck shall be retained in the wash cycle for a minimum of 40 seconds. It is recommended that the wash cycle timer be set at 50 seconds. If truck is not retained in wash cycle for 40 seconds, either manually power wash entire truck as set forth in Section 5.3 or require truck to re-enter the automatic wash system.
6. After the automatic wash, Operator may use 2200 psi power washer to manually power wash load-side of truck, including entire side (top to bottom), wheels and tires, mudflaps, back side and tailgate. This manual power wash may be conducted for each truck as a routine part of wash process. If this procedure is implemented, Operator would mark both "Manual" and "Auto" on the Inspection Form.
7. The truck shall be retained in the dry cycle for a minimum of 40 seconds. If blowers have a separate "trip" mechanism, it is recommended that the dry cycle timer be set at 40 seconds. If blowers have only one "trip" mechanism, it is recommended that the dry cycle timer be set for 70 seconds.
  - a. Blowers will turn on prior to any part of the truck passing the blowers' forced-air zone.
  - b. Blowers will commence before entire wash cycle is completed.

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- c. Blowers will remain on until the sides and all wheels/tires have passed the blowers' forced-air zone.
- d. Blowers shall be re-triggered if manual power wash or spot wash occurs after initial dry cycle has ended.
8. Driver will be instructed to stop the truck at a designated spot (no more than 70' from the Wash Station) which allows approximately 1/3 of trailer to remain inside of Wash Station for inspection in accordance with Section 5.4.

### 5.3 Operation in Event of Automatic Wash Cycle Malfunction

1. Operator shall use manually operated power washer rated at a minimum 2200 psi.
2. The manually operated pressure washer will be used inside the Wash Station.
3. Use top-down approach to manually wash trucks. With the power washer, start at the top leading edge and wash front to back. Upon reaching the back, lower spray location to just below last sweep and continue wash toward front of truck. Continue this process of washing top to bottom until spray distribution reaches bottom edge of trailer.
4. Wash all of the following key truck components: entire sides, back, wheels and tires, wheel well, mudflaps, undercarriage, and tailgate.
5. After completion of manual power wash, Operator shall trigger blowers and direct truck through the dry cycle.
6. On Inspection Form, mark only "manual" wash (not "auto"), and note the reason.

### 5.4 Truck Inspection and Wipe Sampling

1. After the routine wash (i.e., automatic wash and manual power wash) and dry cycles are complete, and the truck has stopped at the designated spot (no more than 70' from the Wash Station) which allows approximately 1/3 of trailer to remain inside of Wash Station for inspection, Operator shall inspect the exterior of the trailer, including sides, tailgate, grain door, air locks, wing nuts, mudflaps, tires and wheels, and complete the relevant portion of the Inspection Form for Trucks Transporting Concentrate (Appendix 5). Specifically note the following:
  - a. tailgate and grain door seals have no gaps and are securely latched.
  - b. air locks are tight against tailgate.
  - c. wing nuts are in place, secure and working properly.
  - d. note any visible staining and mark location on the Inspection Form.
  - e. *for Brushy Creek only*, it is recommended that the Operator inspect (from the top of the ladder) the top of the tarp for loose material that may have dropped onto tarp from overhead conveyor. If present, Operator shall use appropriate device to remove any loose material.
2. If visible staining is observed, Operator shall:
  - a. note location on the Inspection Form.
  - b. spot wash those specific areas with manually operated power washer.
  - c. manually trigger blowers and require portion of trailer that was spot washed to run through dry cycle again.
3. Operator shall conduct Wipe Sample on 10% of trucks (beginning with the first truck to proceed through the wash station each day) and on "bad order" ("BO") trucks. The wipe



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sample procedure is detailed in the Quality Assurance Project Plan for Truck Wipe Sampling and in the Truck Wipe Sample Checklist posted at all wash stations; please refer to it for specific procedures.

4. If any key truck component is in defective condition or "bad order" ("BO"), Operator shall:
  - a. circle "Out of Service" and note reason on Inspection Form.
  - b. require truck to unload (only if carrying a load) in approved lead-bearing material storage area, wash out bed/bedliner, and return through Wash Station before leaving the facility premises.
  - c. conduct Wipe Sample.
  - d. explain to Driver the basis for the BO classification and that no loads may be received by that truck until the defective condition has been corrected.
  - e. provide copy of Inspection Form to Driver for immediate written notification of the defect; the Driver is required to return said Form to the trucking company.
5. Upon completion of inspection, all inspection requirements and observations are to be noted on the Inspection Form.
6. Inspection sheets will be turned in to the supervisor, who will forward truck numbers and required repairs to all employees, contractors, consultants, and temporary employees who supervise over the road lead-bearing transportation systems. Inspections have been designed to inspect both incoming and outbound trucks to help ensure a deficient truck does not attempt a subsequent haul.

### 5.5 Routine Cleaning of Facility

1. Pressure wash (rated at minimum pressure of 2200 psi) the first 70 feet of roadway from the exit side of the Wash Station and the Wash Station floor twice during the day and at the end of the day.
2. This is to be done by starting 70 feet from the Wash Station utilizing a high-pressure wash (rated at minimum pressure of 2200 psi) and cleaning toward the facility drain.

### 5.6 Safety Guidelines

1. Safety equipment required includes appropriate personal protective equipment, including but not limited to, eye protection, hard-hat, gloves and protective boots.
2. In the winter be cautious of ice.
3. Remember water lines, hoses and spray wands are under high pressure. During operation the Operator must stand clear.
4. Operators must also stand clear of blowers during operation
5. Truck Drivers are to remain in the trucks with doors and windows shut
6. The Operator should never walk between the truck and the Wash Station exit door. Always use man doors and aisle ways.

### 6.0 Enforcement

Any employee, contractor, consultant, and temporary employee found to have violated this policy might be subject to disciplinary action, up to and including termination of employment.



## STANDARD OPERATING PROCEDURE

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Approved by:  
Environmental Department

Date:

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### 7.0 Definitions

Term	Definition
Certified Operator	Has read and understands the SOP and Training Manual. Has demonstrated knowledge of all tasks to Certified Trainer through hands on training. Has passed the written test.
Certified Trainer	A salaried member of the environmental department or a Certified Operator who has scored 95% or better on the written test.
Lead-Bearing Concentrate	Ore that has been processed at the mill Concentrate facilities, and includes lead concentrate, zinc concentrate, and copper concentrate.
Lead-Bearing Materials	All granular or semi-granular product or waste material which contains more than 400 milligrams per kilogram (mg/kg) of lead. The Parties do not interpret this definition to include contaminated soils excavated from residential yards, road edges, churches, vacant lots or high child impact areas.

**Pre-Operating Checklist - Wash Stations for Vehicles  
Transporting Concentrate**

Issue date:

Prepared / Reviewed by:  
Environmental Department

Date:

Approved by:  
Environmental Department

Date:

Update date:  
August 2010

Operator Name \_\_\_\_\_ Operator Name \_\_\_\_\_

Operator Name \_\_\_\_\_ Operator Name \_\_\_\_\_

Date \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

BO	OK	Check The Following	Action Taken
		High Pressure Washer Pump Oil Level	
		High Pressure Washer - All Belts are in place	
		High Pressure Washer -Electrical Cord	
		High Pressure Washer - Leaks-Oil/Water	
		Check for Water Leaks-Lines/Hoses/Wands	
		Condition of Spray Wands and Hoses	
		Drain Water Lines (At the end of each shift)	
		Fire Extinguishers/Current Inspection Tag	
		Sump Pump operating correctly	
		Blowers operating correctly	
		Damage to Building (Interior & Exterior)	
		Roll up doors operating properly	
		Water supply line solenoid valve working	
		Side, Tire and Undercarriage Spray Bank Flows	
		✓ Nozzle Angles, Standoff Distance and Location – Any dislocated, No longer in place, bent, signs of metal fatigue, damage to the banks themselves.	
		✓ Nozzle Condition, Cleanliness, integrity and pressure – (Visual guide located in Training Manual)	
		Both Roll up Doors are above Door Frame	
		Stop/Go light system working	
		<b>COLD WEATHER OPERATION</b>	
		Heat Tape plugged in (Cold Weather Only)	
		Furnace turned on (Cold Weather Only)	
		Spray banks weeping (Cold Weather Only)	

NOTE: Marking "BO" for an item means you found that item to be in bad order.

Pressure washed 70 feet exiting Wash Station 3 times daily.

Start: \_\_\_\_\_ Initials: \_\_\_\_\_  
Middle: \_\_\_\_\_ Initials: \_\_\_\_\_  
End: \_\_\_\_\_ Initials: \_\_\_\_\_

Comments \_\_\_\_\_

**EQUIPMENT MUST BE INSPECTED AND SIGNED BY ALL USERS  
AND PLACED ON CLIP BOARD OR DESIGNATED HOME LOCATION IN EACH DEPARTMENT.**





## INSPECTION OF TRUCKS AT CONCENTRATE LOADING STATIONS

### *Before loading trucks*

1. Request from Driver: certification materials and most recent Truck Inspection Form: if prior BO, note correction(s) on current Form.
2. Elevate trailer: inspect underside of bed from side of truck for holes and visible contamination.
3. Inspect tarp position and condition from ladder/platform while tarp is still in place covering trailer, including the following conditions:
  - a. no holes or tears in tarp (i.e., "thumb" rule).
  - b. no gaps between tarp and rim.
  - c. tarp and/or bonnet in place to prevent wind from entering over front edge.

Stay on ladder/platform and have driver role upon the tarp.

4. Inspect bedliner from ladder/platform for:
  - a. visible holes or tears
  - b. correct position (no gaps b/w bedliner and rails, inside walls and bed of trailer).
5. Inspect exterior of trailer from ground level, including sides, tailgate, grain door, air locks, wing nuts, and placards, and ensuring that all components are in closed and secured position upon arrival prior to loading. Specifically note the following:
  - a. tailgate and grain door seals have no gaps and are securely latched.
  - b. air locks are tight against tailgate.
  - c. wing nuts are in place, secure and working properly.
  - d. placards are in place and secured to truck, with bolts/fasteners intact.
  - e. observation of visible contamination should be noted on the relevant part of the truck on the Form.

If components are in good order, then advance truck forward to scale.
6. If any key truck component is in defective condition or "bad order" (BO):
  - a. do not load truck.
  - b. reject, place "Out of Service", and note reason on Form.
  - c. if condition exists that does not warrant a "BO" please note on Form.
  - d. wash and sample at Truck Wash Station.
  - e. explain to Driver the basis for BO classification and that no loads may be received by that truck until defective condition has been corrected.



## INSPECTION OF TRUCKS AT CONCENTRATE LOADING STATIONS

### *After loading trucks*

1. Inspect rim of trailer from ladder/platform while tarp is rolled back in open position. If loose material is on trailer rim, use rim cleaning tool to remove. Once rim is in good order, roll tarp into closed/secured position.
2. Inspect tarp (closed/secured position) from ladder/platform:
  - a. no gaps between tarp and rim.
  - b. no tears or holes in tarp.
  - c. tarp and/or bonnet are in place to prevent wind from entering over front edge.
  - d. no loose material on top of tarp. If loose material is present, remove loose material with appropriate device.
3. If truck is in good order:
  - a. complete and initial relevant portions of Truck Inspection Form
  - b. provide one copy to Driver
  - c. authorize Driver to proceed to Truck Wash Station.
4. If any key truck component is in defective condition or "bad order" (BO):
  - a. unload truck.
  - b. reject, place "Out of Service", and note reason on Form.
  - c. if condition exists that does not warrant a "BO" please note on Form.
  - d. wash and sample at Truck Wash Station.
  - e. explain to Driver the basis for BO classification and that no loads may be received by that truck until defective condition has been corrected.

## PROCEDURES FOR WASH STATIONS FOR TRUCKS TRANSPORTING CONCENTRATE

### Before Operation of Truck Wash

1. Truck pulls up to entrance of Wash Station and waits for signal to enter.
2. Operator must make sure truck is properly lined up with Wash Station. Failure to do so could result in damage to truck and facility.
3. Operator will grant entry to Wash Station only when system has sufficient water to run an entire cycle without disruption of water flow or pressure.

### Operation of Truck Wash (Routine Wash and Dry Cycles)

1. Wash cycle shall be set in excess of 40 seconds and triggered automatically, and truck shall be retained in wash cycle for at least 40 seconds.
2. When entry is granted, Operator shall control truck speed to ensure adequate wash and dry cycle retention times. Truck will drive forward and stop at designated spot prior to blowers. Wash cycle will continue as truck is stationary allowing for maximum cleaning of trailer and wheels.
  - a. Signs will be posted for speed limit.
  - b. Operator will indicate allowed truck movements.
  - c. If truck is not retained in wash cycle for 40 seconds, either power wash entire truck or instruct truck to re-enter truck wash.
3. After the automatic wash, Operator shall use 2200 psi power washer to manually wash load-side of truck, including entire side (top to bottom), wheels and tires, mudflaps, back side and tailgate. This manual power wash shall be conducted for each truck as a routine part of wash process. On Truck Inspection Form, Operator shall mark both "Manual" and "Auto".
4. Dry cycle shall be set in excess of 40 seconds and triggered automatically, and truck shall be retained in dry cycle for at least 40 seconds.
  - a. Blowers may commence before entire wash cycle is completed.
  - b. Blowers shall be re-triggered if manual power wash or spot wash occurs after initial dry cycle has ended.
5. Truck shall stop at designated spot which allows approximately 1/3 of trailer to remain inside of Wash Station for inspection.

### Operation in event of Automatic Wash Cycle Malfunction

1. Operator shall use manually operated power washer rated at a minimum 2200 psi.
2. Use top-down approach to manually wash trucks. With the power washer, start at the top leading edge and wash front to back. Upon reaching the back, lower spray location to just below last sweep and continue wash toward front of truck. Continue this process of washing top to bottom until spray distribution reaches bottom edge of trailer.



## PROCEDURES FOR WASH STATIONS FOR TRUCKS TRANSPORTING CONCENTRATE

3. Wash all of the following key truck components: entire sides, back, wheels and tires, wheel well, mudflaps, undercarriage, and tailgate.
4. After completion of manual power wash, Operator shall trigger blowers and direct truck through the dry cycle.
5. On Truck Inspection Form, mark only "manual" wash (not "auto"), and note reason.

### Truck Inspection

1. After truck has stopped, Operator shall inspect exterior of trailer, including sides, tailgate, grain door, air locks, wing nuts, mudflaps, tires and wheels. Specifically note the following:
  - a. tailgate and grain door seals have no gaps and are securely latched.
  - b. air locks are tight against tailgate.
  - c. wing nuts are in place, secure and working properly.
  - d. note any visible contamination and mark location on Form.
  - e. for Brushy Creek only, from top of ladder Operator shall inspect top of tarp for loose material that may have dropped onto tarp from overhead conveyor. If present, Operator shall use appropriate device to remove any loose material.
2. If visible contamination is observed, Operator shall:
  - a. note location on Form.
  - b. spot wash those specific areas with manually operated power washer.
  - c. manually trigger blowers and require portion of trailer that was spot washed to run through dry cycle again.
3. Operator shall conduct Wipe Sample on 10% of trucks and on "bad order" ("BO") trucks.
4. If any key truck component is in defective condition or "bad order" ("BO"), Operator shall:
  - a. circle "Out of Service" and note reason on Form.
  - b. require truck to unload (only if carrying a load) in approved lead-bearing material storage area, wash out bed/bedliner, and return through Truck Wash Station before leaving the facility premises.
  - c. conduct Wipe Sample.
  - d. explain to Driver the basis for the BO classification and that no loads may be received by that truck until the defective condition has been corrected.
5. Upon completion of inspection, all inspection requirements and observations are to be noted on Truck Inspection Form.



## INSPECTION OF TRUCKS AT CONCENTRATE UNLOADING STATIONS

### *Before unloading trucks*

1. Inspect tarp position and condition from ladder/platform while tarp is still closed, note the following conditions:
  - a. no holes or tears in tarp (i.e., "thumb" rule).
  - b. no gaps between tarp and rim.
  - c. tarp and/or bonnet in place to prevent wind from entering over front edge.
2. Inspect exterior of trailer from ground level, including sides, tailgate, grain door, air locks, wing nuts, and placards, and ensuring that all components are in closed and secured position upon arrival prior to unloading. Specifically note the following:
  - a. tailgate and grain door seals have no gaps and are securely latched.
  - b. air locks are tight against tailgate.
  - c. wing nuts are in place, secure and working properly.
  - d. placards are in place and secured to truck, with all bolts/fasteners intact.
  - e. note any visible contamination and mark location on Form.

### *After unloading trucks*

1. While trailer is in completely raised position:
  - a. wash out interior of trailer and bedliner (unless reloading lead-bearing material at same location).
  - b. during and/or after wash out inspect bedliner for: (i) visible holes or tears; (ii) correct position (no gaps b/w bedliner and rails, inside walls and bed); and (iii) condition and position of bedliner rails.
  - c. wash off trailer exterior components (including rim, load side, back, and tailgate).
2. While trailer is in completely raised position:
  - a. inspect bed (view underside of bed from rear side of truck) for visible holes and/or leaking water.
  - b. if water leakage is seen, lower trailer and conduct closer inspection.
3. If any key truck component is in defective condition or "bad order" (BO):
  - a. reject and place "Out of Service" and note reason on Form.
  - b. wash and sample at the truck wash station.
  - c. if condition exists that does not warrant a "BO" please note on Form.
  - d. explain to Driver the basis for the BO classification and that no loads may be received by that truck until the defective condition has been corrected.
4. If the truck is in good order:
  - a. complete and initial the relevant portions of the Truck Inspection Form.
  - b. provide one copy to Driver.
  - c. authorize Driver to proceed to Truck Wash Station.





The Doe Run Company  
Inspection Form for Trucks Transporting Concentrate  
SOP Appendix 5

My initials on this form certify under penalty of law that I have inspected the areas of this truck listed below. The information contained on this form is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

### Truck Cleanliness

< Particular attention to sides, rim, tailgate, tires, wheels, undercarriage mudflaps, steps >

	Loading Station <i>Inspector Initial</i>		Loading Wash Station <i>Inspector Initial</i>		Unloading Station <i>Inspector Initial</i>		Unloading Wash Station <i>Inspector Initial</i>	
Truck Washed			Manual      Auto				Manual      Auto	
Visible stains and/or loose material	Yes	No	Yes	No	Yes	No	Yes	No
Mark location of stains/loose materials								
Were areas noted scrubbed/power washed			N/A    Yes    No		N/A    Yes    No		N/A    Yes    No	
Bedliner Washed Out					N/A    Yes    No			

### Truck Inspection

< If truck fails inspection, instruct to make repairs. If at unloading location, wash out bed before allowing truck to leave plant >

Tarp has no visible holes or tears	OK	BO		OK	BO		OK	BO	
Tarp position correct	OK	BO		OK	BO		OK	BO	
Tail Gate securely latched and sealed	OK	BO		OK	BO		OK	BO	
Grain Door closed, securely latched and sealed	N/A	OK	BO	N/A	OK	BO	N/A	OK	BO
Air Locks	OK	BO		OK	BO		OK	BO	
Wing Nut(s)	OK	BO		OK	BO		OK	BO	
Placards on 4 sides	OK	BO		OK	BO		OK	BO	
Bed has no visible holes	OK	BO		OK	BO		OK	BO	
Bedliner installed correctly / in good condition	OK	BO		OK	BO		OK	BO	
Truck Tire Wipe Sample (required for 10% and BO)			Yes    No		Yes    No		Yes    No		
If BO'd, circle Out of Service	Out of Service		Out of Service		Out of Service/Wash Bed		Out of Service		

**NOTES:** 1) Each truck removed from service must be sampled. 2) "BO" = truck component is in bad order. 3) "N/A" = not applicable or not able to be inspected.

Load Facility (Circle):	Buick	Fletcher	Brushy Creek	Sweetwater	Herculaneum	Buick Resource	Glover	Other: _____
Unload Facility (Circle):	Herculaneum	Glover	SEMO Port	Bussen Barge	Other: _____			

VIEW PRIOR LOAD SHEET (Loading Inspector Only)		COMMENTS
Yes	No	

DATE	LOADING TIME	TRUCKING COMPANY	TRUCK NUMBER	TRAILER NUMBER	SCALE TICKET NUMBER

ANY ADDITIONAL COMMENTS / NOTABLE CONDITIONS

Signature of Truck Driver    Print \_\_\_\_\_ Sign \_\_\_\_\_



### 1.0 Overview

Doe Run is committed to protecting human health and the environment. Effective wash and inspection procedures and Wash Stations require a team effort involving the participation and support of every Doe Run employee, contractor and consultant who deals with vehicles loading or unloading Ore or Lead-Bearing Materials at a Doe Run-owned or -operated facility. It is the responsibility of every user to understand this Standard Operating Procedure ("SOP"), and to conduct their activities accordingly.

### 2.0 Purpose

The purpose of this SOP is to establish the method of washing and inspecting vehicles at Doe Run's Missouri facilities where Ore or Lead-Bearing Materials are transferred onto or off of vehicles, where the vehicles enter/exit facilities above ground, and to define methods of backup due to mechanical failure at the Wash Station. This SOP is in place to protect human health and the environment.

### 3.0 Scope

This SOP applies to employees, contractors and consultants at Doe Run's Missouri facilities, including affiliated third party personnel. This policy applies to all equipment that is used to handle and transport Ore or Lead-Bearing Materials over the public roads. Other vehicles that enter or cross an area within a Doe Run facility where Lead-Bearing Materials are handled or stored shall be washed and dried in the vehicle wash station prior to exiting the facility. Inspection forms will not be required for these other vehicles that are not transporting Concentrate, Ore or other Lead-Bearing materials to and from Doe Run facilities.

This SOP includes Appendices. Note Appendices may vary from site-to-site in order to enhance the training and lend insight to site-specific requirements. The purpose of the SOP is to provide consistency in the vehicle inspection and wash operations to allow for effective statistical process control. Any variation will be a result of very minor differences in configuration and location of wash stations and ancillary equipment (e.g., tanks, water valves, piping, power washer, etc.). While the specific physical conditions may be different from site to site, the basic objectives and standard requirements are identified and must be achieved at all facilities. Any material deviation must be set forth in a site-specific appendix and be both submitted and approved by the EPA. Although they may vary in content, each site will have the following appendices:

- ✓ Appendix 1 Operating Guidelines – Daily Inspection of Vehicles Transporting Ore or Lead-Bearing Materials
- ✓ Appendix 2 Pre-Operating Checklist for Wash Stations for Vehicles Transporting Ore or Lead-Bearing Materials
- ✓ Appendix 3 Inspection and Wash Form for Vehicles Transporting Ore or Lead-Bearing Materials
- ✓ Appendix 4 Operating Guidelines – Procedures for Wash Stations for Vehicles Transporting Ore or Lead-Bearing Materials

The following are covered by the policy:

- ✓ Every vehicle leaving a facility above ground after loading or unloading Ore or Lead-Bearing Materials.



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- ✓ Wash Stations.
- ✓ Wash Station Operators and Inspectors.

#### 4.0 Inspection of Vehicles Transporting Ore or Lead-Bearing Materials

Vehicles transporting Ore or Lead-Bearing Materials must be inspected twice daily by a Doe Run Operator/Inspector in accordance with the procedures established in Appendix 1 Operating Guidelines – Daily Inspection of Vehicles Transporting Ore or Lead-Bearing Materials. The "First Daily Inspection" is required prior to the first load of the day. Driver must provide to Inspector the previous hauling day's Inspection and Wash Form (Vehicles Transporting Ore or Lead-Bearing Materials). Inspector shall complete and initial the section of the Form (Appendix 3 Inspection and Wash Form for Vehicles Transporting Ore or Lead-Bearing Materials) entitled "First Daily Inspection", keep the bottom copy of the Form, and return the remainder of the Form to Driver. The "Second Daily Inspection" is required sometime after the 4<sup>th</sup> load and prior to the last load of the day (timing of the second inspection is at Inspector's discretion). Inspector shall complete and initial the section of the Form entitled "Second Daily Inspection", keep the top (original) copy of the Form, and return the middle copy of the Form to Driver. In addition to the more comprehensive Daily Inspections, loaded vehicles transporting Ore or Lead-Bearing Materials must undergo more limited "tailgate and rim inspections" at the load Wash Station in accordance with Appendix 4 Procedures for Wash Stations for Vehicles Transporting Ore or Lead-Bearing Materials ("Tailgate and Rim Inspection") and the appropriate areas on the Form must be completed. Forms will be turned into the responsible designee, who will forward Vehicle numbers and required repairs, if any are indicated, to all employees and contractors who supervise Ore and Lead-Bearing Materials transportation systems.

#### 5.0 Operating Policies

Only Certified Operators are to operate the Wash Station. Certification is based on:

- ✓ Demonstrated understanding of the SOP, operating guidelines, safety practices, inspection practices.
- ✓ Hands-on training performed by a certified trainer for both the automatic wash system and the manual power washer.
- ✓ A written test will be administered to verify training.

Automatic Facility Design Requirements:

Shall be enclosed.

Shall be designed to fully and safely operate during all seasons of the year.

Shall be located at or near the exit of the facility property.

Shall have backup wash systems as described in Section 5.4.

The Design will be to wash: undercarriages, entire sides, back, tailgates, tires, mud flaps, wheel wells and wheels.

- ✓ The facility will have the necessary equipment such as spray nozzles, power washer rated at a minimum of 2200 psi, etc., at appropriate location, position and angle such that baseline performance is met or exceeded. These parameters will be inspected and recorded on a regular basis a part of the Pre-Operating Checklist.
  - During the pre-operating check the Operator will check the aim and integrity of the nozzles to assure the Wash Station is in optimum operating condition.

- Water flow and recharge rates and pressures will vary upon facility design and available resources and will meet or exceed performance of baseline measurements taken at Herculeaneum during the 1000-truck baseline sample.
- Water will be sampled once per month to check for lead content.
- ✓ Wash water will be collected, treated and discharged in accordance with all state and federal requirements and permits.

### **5.1 Before Operation of Wash Station**

1. These procedures will be performed/followed at the beginning of each day shift.
2. Start-up Wash Station.
3. Run a wash cycle empty with no vehicle present.
4. Operator must complete a pre-operating checklist of the facility (See Appendix 2 Pre-Operating Checklist for Wash Stations for Vehicles Transporting Ore or Lead-Bearing Materials).
5. The pre-operating checklist is to be submitted to the supervisor and kept on file for 10 years.
6. The supervisor will forward requests for corrective action to the maintenance department.
7. If Wash Station is deemed inoperable during or after the pre-operating inspection, see Section 5.4 for alternative washing techniques.
8. After Corrective Action is complete, a record will be placed into the file.

### **5.2 Operation of Wash Station**

1. Vehicle pulls up to the entrance of the Wash Station and waits for signal to enter. A stop/go light system will be employed at facilities and Drivers must follow the signal lights.
2. The signal light will be set so that entry to the Wash Station is only authorized when the system has sufficient water to run an entire cycle without disruption of water flow or pressure.
3. When entry is granted, the wash cycle will automatically start (with a "trip" wire), 5 mph is the maximum speed limit (as posted). Driver will move vehicle slowly forward and pause and stop as directed by the signal light and the Doe Run Operator to ensure adequate retention in the wash and dry cycles.
4. The wash cycle timer shall be set at 45 seconds and triggered automatically (with a "trip" wire) to help ensure adequate retention and cleaning.
5. The dry cycle timer shall be set at 45 seconds and triggered automatically (with a separate "trip" wire) to help ensure adequate retention and drying. The blowers shall be positioned and set to enable the following:
  - a. Blowers will commence prior to any part of the vehicle passing the blowers' forced-air zone.
  - b. Blowers will be running as the vehicle exits the wash cycle, while the wash cycle is still operating.
  - c. Blowers will remain on until the sides and all wheels/tires have passed the blowers' forced-air zone.
6. If at the unload wash station, Operator shall complete the Form (Appendix 3 Inspection and Wash Form for Vehicles Transporting Ore or Lead-Bearing Materials) and return it



to Driver. If at the load wash station, Operator shall conduct the Tailgate and Rim Inspection as established in Section 5.3, complete the Form and return it to Driver.

### 5.3 Tailgate and Rim Inspection (Only at Load Wash Station)

1. After vehicle has stopped, Operator shall inspect the rim of the vehicle carriage/bed (only at load wash station) and complete the Form (Appendix 3 Inspection and Wash Form for Vehicles Transporting Ore or Lead-Bearing Materials). If no loose material is present on the rim, circle "N/A" (not applicable) on the Form in the "Rim cleaned?" box. If loose material is present on the rim, Operator shall use the rim cleaning tool to remove any loose material. Once the loose material is removed from the rim, circle "Y" (yes) on the Form, indicating that the rim has been cleaned.
2. Operator shall inspect the tailgate. Specifically note the following:
  - a. tailgate is securely latched and has no gaps through which Ore or Lead-Bearing Materials could be released.
  - b. confirm that there is no evidence of Ore or Lead-Bearing Materials leakage from or around the tailgate.
3. If the tailgate is secure, there is no gap between tailgate and vehicle wall through which Ore or Lead-Bearing Materials could be released, and there is no Ore or Lead-Bearing Materials leakage from or around the tailgate, circle "Y" (yes) on Form in "Secure tailgate (no leakage)?" box.
4. If a gap exists between tailgate and vehicle wall through which Ore or Lead-Bearing Materials could be released, or if Ore or Lead-Bearing Materials leakage is observed, Operator shall:
  - a. note specific problem and circle "N" (no) on the Form in the "Secure tailgate (no leakage)?" box.
  - b. require Driver to return to the Ore or Lead-Bearing Materials loading location and to unload the vehicle's contents into the Ore or Lead-Bearing Materials pile.
  - c. require Driver to return the vehicle to the wash station for routine wash and dry cycles, and note completion of wash/dry cycle on Form.
  - d. require Driver to repair the deficiency prior to receiving and hauling another load.
5. Operator shall return the Form to Driver.

### 5.4 Operation in Event of Automatic Wash Cycle Malfunction

1. Operator shall use manually operated power washer rated at a minimum 2200 psi.
2. The manually operated pressure washer will be used inside the Wash Station.
3. Use top-down approach to manually wash vehicles. With the power washer, start at the top leading edge and wash front to back. Upon reaching the back, lower spray stream to just below last sweep and continue wash toward front of vehicle. Continue this process of washing top to bottom until spray distribution reaches bottom edge of vehicle.
4. Wash all of the following key vehicle components: entire sides, back, wheels and tires, wheel well, mudflaps, undercarriage (unloading location only), and tailgate.
5. After completion of manual power wash, Operator shall trigger blowers and direct vehicle through the dry cycle.
6. On the Wash and Inspection Form (Appendix 3), write "manual" in the "Time" box, and return the Form to Driver.



### **5.5 Routine Cleaning of Facility**

1. Pressure wash (rated at minimum pressure of 2200 psi) the first 70 feet of roadway from the exit side of the Wash Station and the Wash Station floor twice during the day and at the end of the day.
2. This is to be done by starting 70 feet from the Wash Station utilizing a high-pressure wash (rated at minimum pressure of 2200 psi) and cleaning toward the facility drain.

### **5.6 Safety Guidelines for Operator**

1. Safety equipment required includes appropriate personal protective equipment, including but not limited to, eye protection, hard-hat, gloves and protective boots.
2. In the winter be cautious of ice.
3. Remember water lines, hoses and spray wands are under high pressure. During operation the Operator must stand clear.
4. Operator must also stand clear of blowers during operation.
5. Drivers are to remain in the vehicles with doors and windows shut.
6. Operator should never walk between the vehicle and the Wash Station exit door. Always use man doors and aisle ways.

### **6.0 Enforcement**

Any employee, contractor and consultant found to have violated this policy must be subject to disciplinary action, up to and including termination of employment.

## 7.0 Definitions

### Term

### Definition

Certified Operator

Has read and understands the SOP and Training Manual. Has demonstrated knowledge of all tasks to Certified Trainer through hands on training. Has passed the written test.

Certified Trainer

A salaried member of the environmental department or a Certified Operator who has scored 95% or better on the written test.

Lead-Bearing  
Materials

All granular or semi-granular product or waste material which contains more than 400 milligrams per kilogram (mg/kg) of lead. The Parties do not interpret this definition to include contaminated soils excavated from residential yards, road edges, churches, vacant lots or high child impact areas.

Ore

Ore is rock/mineral with approximately 4.25% lead content that has been extracted and crushed into 2" – 8" chunks and fragments (on average) in a subsurface mine, conveyed to the surface and loaded into vehicles to be transported to and processed at the mill facilities.

Vehicle

A truck, trailer or pup hauling Ore or Lead-Bearing Materials.

## DAILY INSPECTION OF VEHICLES TRANSPORTING ORE OR LEAD-BEARING MATERIALS

Vehicles transporting Ore or Lead-Bearing Materials must be inspected twice daily by a Doe Run Operator/Inspector ("Inspector"). The "First Daily Inspection" is required prior to the first load of the day. Driver must provide to Inspector the previous hauling day's Inspection and Wash Form. Inspector shall complete and initial the section of the Form entitled "First Daily Inspection", and return the Form to Driver.


The "Second Daily Inspection" is required sometime after the 4<sup>th</sup> load and prior to the last load of the day (timing of the second inspection is at Inspector's discretion). Inspector shall complete and initial the section of the Form entitled "Second Daily Inspection", and return the Form to Driver.

1. Request from Driver: most recent Inspection and Wash Form. If a prior "BO" was noted on the previous Form, note the physical repair on the current Form, if completed. If repair not complete, do not load.
2. Request that Driver elevate the vehicle bed/carriage. Inspect undercarriage from side of vehicle for holes and visible ore contamination, then return vehicle carriage/bed to normal operating position.
3. Inspect tarp position and condition from ladder/platform while tarp is still in place covering trailer, including the following conditions:
  - a. no significant holes or tears in tarp (i.e., "thumb" rule).
  - b. tarp is in correct position covering the vehicle bed.
4. Stay on ladder/platform and request that Driver role up the tarp into open position.
5. From ladder/platform, inspect interior of vehicle bed for visible holes.
6. From ground level, inspect exterior of trailer, including sides, tailgate, air locks, and vertical bolts – ensuring that all components are functioning and are in closed and secured position in preparation for loading. Specifically note the following:
  - a. tailgate is securely latched and has no gaps through which Ore or Lead-Bearing Materials could be released.
  - b. air locks are tight against tailgate.
  - c. vertical bolts are in place and secure.
  - d. confirm that there is no evidence of ore leakage from or around the tailgate.
7. If any key vehicle component (as identified on the Inspection and Wash Form) is in defective condition or "bad order" (BO):
  - a. do not load vehicle.
  - b. reject the vehicle, circle "BO" ("bad order") on Form and note specific details, as necessary.
  - c. place the vehicle "Out of Service".



**DAILY INSPECTION OF VEHICLES TRANSPORTING ORE OR LEAD-BEARING MATERIALS**

- d. explain to Driver the basis for BO classification and that no loads may be received by that vehicle until the defective condition has been corrected.
- e. require Driver to drive vehicle to wash station for routine wash.

		<b>SOP Appendix 2</b>		Code N°:
<b>Pre-Operating Checklist – Wash Station for Vehicles Transporting Ore and Lead-Bearing Materials</b>				Issue date:
Prepared / Reviewed by: Environmental Department	Date:	Approved by: Environmental Department	Date:	Update date: August 2010

Operator Name \_\_\_\_\_ Operator Name \_\_\_\_\_

Operator Name \_\_\_\_\_ Operator Name \_\_\_\_\_

Date \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

BO	OK	Check The Following	Action Taken
		High Pressure Washer Pump Oil Level	
		High Pressure Washer - All Belts are in place	
		High Pressure Washer -Electrical Cord	
		High Pressure Washer - Leaks-Oil/Water	
		Check for Water Leaks-Lines/Hoses/Wands	
		Condition of Spray Wands and Hoses	
		Drain Water Lines (At the end of each shift)	
		Fire Extinguishers/Current Inspection Tag	
		Sump Pump operating correctly	
		Blowers operating correctly	
		Damage to Building (Interior & Exterior)	
		Roll up doors operating properly	
		Water supply line solenoid valve working	
		Side, Tire and Undercarriage Spray Bank Flows	
		✓ Nozzle Angles, Standoff Distance and Location – Any dislocated, No longer in place, bent, signs of metal fatigue, damage to the banks themselves.	
		✓ Nozzle Condition, Cleanliness, integrity and pressure – (Visual guide located in Training Manual)	
		Both Roll up Doors are above Door Frame	
		Stop/Go light system working	
		<b>COLD WEATHER OPERATION</b>	
		Heat Tape plugged in (Cold Weather Only)	
		Furnace turned on (Cold Weather Only)	
		Spray banks weeping (Cold Weather Only)	

NOTE: Marking "BO" for an item means you found that item to be in bad order.

Pressure washed 70 feet exiting Wash Station 3 times daily.

Start: \_\_\_\_\_ Initials: \_\_\_\_\_  
 Middle: \_\_\_\_\_ Initials: \_\_\_\_\_  
 End: \_\_\_\_\_ Initials: \_\_\_\_\_

Comments \_\_\_\_\_

**EQUIPMENT MUST BE INSPECTED AND SIGNED BY ALL USERS  
 AND PLACED ON CLIP BOARD OR DESIGNATED HOME LOCATION IN EACH DEPARTMENT.**





**The Doe Run Company**  
**Inspection and Wash Form for Vehicles Transporting Ore and Lead-Bearing Materials**  
**SOP Appendix 3**

Operator/Inspector shall complete all portions of this Form after conducting the inspection and wash activities.

My initials on this form certify under penalty of law that I have inspected the areas of the vehicle listed below. The information contained on this form is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Date:	Vehicle #:	Driver:	Company:
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***FIRST DAILY INSPECTION (inspection required prior to first load of the day; must review previous day's Form)***

Location:		Time:		Operator/Inspector (full name):			
Tarp: functional, no visible holes	Tarp position	Tailgate: no gaps	Air locks	Vertical bolts		Trailer/pup walls and bed: no holes	
OK    BO	OK    BO	OK    BO	OK    BO	OK    BO		OK    BO	
Description of BO Condition:							

***WASH AND TAILGATE INSPECTION***

*WASH TIME*

Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			
Load Wash Station: #35 Mine/Castel #29 Mine/Viburnum	Rim Cleaned? Y N/A	Secure tailgate (no leakage)? Y N	
Unload Wash Station: Buick Mine/Mill Other _____			

***SECOND DAILY INSPECTION (inspection required sometime after 4<sup>th</sup> load and prior to last load of the day)***

Location:		Time:		Operator/Inspector (full name):			
Tarp: functional, no visible holes	Tarp position	Tailgate: no gaps	Air locks	Vertical bolts		Trailer/pup walls and bed: no holes	
OK    BO	OK    BO	OK    BO	OK    BO	OK    BO		OK    BO	
Description of BO Condition:							

Top/White Copy – Environmental Project Manager    Middle/Yellow Copy – Carrier Truck Driver    Bottom/Pink Copy – Loading Facility Copy



## WASH STATION PROCEDURES FOR VEHICLES TRANSPORTING ORE OR LEAD-BEARING MATERIALS

Vehicles transporting Ore or Lead-Bearing Materials must be washed twice per load – (1) after loading, and prior to entering onto public roadways and hauling Ore or Lead-Bearing Materials; and (2) after unloading, and prior to exiting Doe Run facility and entering onto public roadways. At the Wash Station, a Doe Run Operator/Inspector shall conduct and monitor the wash/dry cycles, inspect the rim and tailgate (load wash station only), and complete and initial the relevant portions of the Inspection and Wash Form for Vehicles Transporting Ore or Lead-Bearing Materials. After each wash/inspection, the Doe Run Operator/Inspector shall return the Form to Driver.

### Before Operation of Wash Station

1. Vehicle pulls up to entrance of Wash Station and waits for signal to enter.
2. Operator must make sure vehicle is properly lined up with Wash Station. Failure to do so could result in damage to vehicle and facility.
3. Operator will allow entry to Wash Station only when system has sufficient water to run an entire cycle without disruption of water flow or pressure.

### Operation of Wash Station (Routine Wash and Dry Cycles)

1. The wash cycle timer shall be set at 45 seconds and triggered automatically to help ensure adequate retention and cleaning of the vehicles. Vehicles must be washed for a minimum of 40 seconds.
2. When entry is allowed, Driver shall move the vehicle slowly forward through the automated wash cycle, minding the Operator's direction and signals to ensure adequate wash and dry cycle retention times.
  - a. Signs will be posted for speed limit.
  - b. Operator will indicate allowed vehicle movements.
3. During the automatic wash, Operator shall be positioned at the entrance of the wash station and shall use a power washer rated at a minimum of 2200 psi to manually wash the entire back side and tailgate (top to bottom). This manual power wash shall be conducted for each vehicle as a routine part of wash process, *unless* the wash station is designed to wash the entire tailgate and is effectively accomplishing that objective.
4. Dry cycle shall be set at 45 seconds and triggered automatically (with a separate "trip" wire) to help ensure adequate retention and drying of the vehicles. Vehicles must be dried for a minimum of 40 seconds.
  - a. Blowers may commence before entire wash cycle is completed and will be running as vehicle exits the wash cycle.
  - b. Blowers will remain on until the sides and all wells/tires have passed the blowers.



## WASH STATION PROCEDURES FOR VEHICLES TRANSPORTING ORE OR LEAD-BEARING MATERIALS

5. Vehicle shall stop at designated spot which allows approximately 1/3 of vehicle to remain inside of Wash Station for tailgate and Ore or Lead-Bearing Materials leakage inspection (*only* at load wash station). If at unload wash station, return completed Form to Driver.

### Tailgate and Rim Inspection (*Only* at Load Wash Station)

1. After vehicle has stopped, inspect rim of vehicle carriage. If no loose material is present on rim, circle "N/A" (not applicable) on Form in "Rim cleaned?" box. If loose material is present on rim, use rim cleaning tool/brush to remove any loose material. Once loose material is removed, circle "Y" (yes) on Form.
2. Operator shall inspect the tailgate. Specifically note the following:
  - a. tailgate is securely latched and has no gaps through which Ore or Lead-Bearing Materials could be released.
  - b. confirm that there is no evidence of Ore or Lead-Bearing Materials leakage from or around the tailgate.
3. If the tailgate is secure, there is not a gap between tailgate and vehicle wall through which Ore or Lead-Bearing Materials could be released, and there is no Ore or Lead-Bearing Materials leakage from or around the tailgate, circle "Y" (yes) on Form in "Secure tailgate (no leakage)?" box.
4. If a gap exists between tailgate and vehicle wall through which Ore or Lead-Bearing Materials could be released, or if Ore or Lead-Bearing Materials leakage is observed, Operator shall:
  - a. note specific problem and circle "N" (no) on Form in "Secure tailgate (no leakage)?" box.
  - b. require Driver to return to loading location and to unload vehicle's contents into the stockpile.
  - c. require Driver to return to the wash station for routine wash and dry cycles, note completion of wash/dry cycle on Form.
  - d. require Driver to repair the deficiency prior to receiving and hauling another load.
5. Return completed Form to Driver.

### Operation in Event of Automatic Wash Cycle Malfunction

1. Operator shall use manually operated power washer rated at a minimum 2200 psi.
2. Use top-down approach to manually wash vehicles. With the power washer, start at the top leading edge and wash front to back. Upon reaching the back, lower spray stream to just below last sweep and continue to wash toward front of vehicle. Continue this process of washing top to bottom until spray distribution reaches bottom edge of vehicle.

## WASH STATION PROCEDURES FOR VEHICLES TRANSPORTING ORE OR LEAD-BEARING MATERIALS

3. Wash all of the following key vehicle components: entire sides, back, wheels and tires, wheel well, mudflaps, undercarriage (unload location only or if BO'd at the loading area), and tailgate.
4. After completion of manual power wash, Operator shall trigger blowers and direct vehicle through the dry cycle.
5. On Inspection and Wash Form for Vehicles Transporting Ore or Lead-Bearing Materials, write "manual" next to the "Time" box, and return completed Form to Driver.





CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing Order was sent this day in the following manner to the addressees:


Copy hand delivered to  
Attorney for Complainant:

Steven Sanders  
Assistant Regional Counsel  
Region 7  
United States Environmental Protection Agency  
901 N. 5<sup>th</sup> Street  
Kansas City, Kansas 66101

Copy by Certified Mail Return Receipt to:

Calvin R. Keller  
Environmental Manager Primary Smelting  
The Doe Run Company  
881 Main Street  
Herculaneum, Missouri 63048

Dated: 1/9/12

  
Kathy Robinson  
Hearing Clerk, Region 7

