BEFORE THE

OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Shieldalloy Metallurgical Corporation	:	Directors Final Findings
60970 Southgate Road	:	and Orders
Cambridge, Ohio 43725	:	

OHIO E.P.A.
OCT 26 2004
ENTERED DIRECTOR'S JOURNAL

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to Shieldalloy Metallurgical Corporation ("Respondent") pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("ORC") §§ 3704.03 and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of the Respondent, or of the facility (as hereinafter identified) owned by Respondent, shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in ORC Chapter 3704 and the regulations promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA has determined the following findings:

1. Respondent produces metal alloys and industrial inorganic chemicals, with a facility located at 60970 Southgate Road, Jackson Township, Guernsey County, Ohio. At this facility, Respondent employs a multiple hearth roaster furnace (Ohio EPA emissions unit P014, Dept. 125 Fly Ash Roaster), which is equipped with a dry scrubber to control sulfur dioxide ("SO_2") emissions and a baghouse to control emissions of particulate matter ("PM"), as defined in Ohio Administrative Code ("OAC") Rule 3745-17-01(B)(12). Operation of emissions unit P014 also has the potential to release fugitive dust, as defined in OAC Rule 3745-17-01(B)(6). Emissions unit P014 is an "air contaminant source," as defined in OAC Rule 3745-15-01(C) and (W).

2. OAC Rule 3745-18-06(E) establishes SO_2 emission limits for stationary air contaminant sources by providing equations to calculate the allowable SO_2 emission rate, in pounds of SO_2 per hour, based on the source's process weight rate, in tons per hour.

3. ORC § 3704.05(C) states, in part, that no person who is a holder of a permit issued under ORC § 3704.03(F) or (G) shall violate any of its terms or conditions.

4. ORC § 3704.05(J)(2) states, in part, that no person shall violate any applicable requirements of a Title V permit or any permit condition, except for an emergency as defined in Chapter 40 of the Code of Federal Regulations 70.6(g).

5. Ohio EPA issued a Title V permit to Respondent (Facility ID: 06-30-01-0005) on September 26, 2001. A final modified Permit to Install ("PTI") for emissions unit P014 was issued to Respondent on May 23, 2002 . Respondent was required by the permits to employ best available technology for the control measures used on emissions unit P014 (such as maintaining enclosures and venting emissions to a baghouse) to meet the PM emission limit of 0.010 grain of PM per dry standard cubic foot ("gr/dscf") of exhaust gases. The permits also require that there be no visible PM emissions from the operation of emissions unit P014. The permits also established an SO_2 emission limit for emissions unit P014 of 78.1 pounds per hour (342.1 tons per year), as calculated from the equation in OAC Rule 3745-18-06(E)(2), using the process weight for emissions unit P014, in tons per hour, and the operating schedule provided by Respondent.

6. The modified multiple hearth fly ash roaster (emissions unit P014) became operational in June 2002 after the flue gas desulfurization ("FGD") dry scrubber unit was installed to control SO_2 emissions.

7. On October 29, 2002, Respondent submitted its quarterly excess emissions report for emissions unit P014, as required by Section A.IV.1 of its Title V permit. This report is required to address exceedances of the applicable limit of 78.1 pounds of SO_2 emissions per hour, as a three-hour rolling average, for emissions unit P014 and is required to be submitted to Ohio EPA within 30 days of the end of the calendar quarter. The report submitted on October 29, 2002 addressed excess emissions that occurred during the third calendar quarter of 2002 (i.e., July 1, 2002 through September 30, 2002). In this report, Respondent reported that operation of emissions unit P014 exceeded the applicable SO_2 emission limit on 24 separate days.

8. On November 15 and 16, 2002, Respondent employed Air Compliance Testing, Inc. to conduct PM emission compliance testing on emissions unit P014. Ohio EPA, Southeast District Office, Division of Air Pollution Control ("SEDO"), reviewed the test results and determined that the test was conducted in compliance with USEPA Test Methods 1 through 5, per 40 CFR, Part 60, Appendix A. SEDO determined that the results of the test showed emissions unit P014 to be out of compliance with permit terms and conditions for PM emissions. Specifically, the tested PM emissions were 0.025 gr/dscf, which was greater than the PM emission limit of 0.010 gr/dscf per the PTI and Title V permit. SEDO informed Respondent of the results of the test review in a Notice of Violation ("NOV") dated January 9, 2003, and requested that Respondent submit an

acceptable plan and compliance schedule to SEDO within thirty days of receipt of the letter.

9. On November 15, 2002, Respondent also had SO_2 emission testing on emissions unit P014 conducted in compliance with USEPA Test Methods 1 through 4, and 6, per 40 CFR, Part 60, Appendix A. This testing was conducted as part of the certification of the continuous emission rate monitoring system ("CEMS") for SO_2 for emissions unit P014, as required by Respondent's Title V permit. Due to testing difficulties, certification was not completed. Respondent had another test conducted for certification of the CEMS for SO_2 for emissions unit P014 on January 23, 2003, which found P014 to be in compliance with the Title V permit limit for SO_2 emissions. On June 18, 2003, Ohio EPA, in a letter to Respondent, determined that the above-referenced CEMS had met the requirements of the applicable performance specifications and was considered certified to provide compliance data.

10. On January 28, 2003, Respondent submitted its quarterly excess emissions report for emissions unit P014 for the fourth calendar quarter of 2002 (i.e., October 1, 2002 through December 31, 2002). In this report, Respondent reported that operation of emissions unit P014 exceeded the applicable SO_2 emission limit on 28 separate days.

11. On January 30, 2003, Respondent replied to SEDO's January 9, 2003, NOV for the PM emission violations. Respondent stated that emissions unit P014 was taken out of service on November 23, 2002, when Respondent learned of the out of compliance condition for PM emissions. Respondent described the repair and maintenance activities conducted on the emissions unit's air pollution control equipment during the non-operational period. The unit was placed back in service on January 7, 2003, and another emission compliance test was conducted for PM emissions on emissions unit P014 by Air Compliance Testing, Inc. on January 23, 2003.

12. SEDO reviewed the results from the January 23, 2003, emission test and determined that the test was conducted in compliance with USEPA Test Methods 1 through 5. SEDO again determined that the results of the test showed emissions unit P014 to be out of compliance with permit terms and conditions for PM emissions with tested PM emissions of 0.053 gr/dscf. SEDO informed Respondent of the results of the test review in an NOV dated April 1, 2003, and requested that Respondent submit an acceptable plan and schedule for achieving compliance to SEDO within thirty days of receipt of the letter.

13. On April 28, 2003, Respondent submitted its quarterly excess emissions report for emissions unit P014 for the first calendar quarter of 2003 (i.e., January 1, 2003 through March 31, 2003). In this report, Respondent reported that operation of emissions unit P014 exceeded the applicable SO_2 emission limit on 33 separate days.

14. Respondent replied to SEDO's April 1, 2003 NOV for PM emission violations on May 7, 2003. Respondent stated that after the January 23, 2003, testing it was determined that emissions unit P014 was still out of compliance with the PM emission limitation and, therefore, the unit was taken out of service on January 27, 2003.

Respondent described the repair and maintenance activities conducted on the emissions unit's air pollution control equipment during the non-operational period. The unit was placed back in service on March 6, 2003, and another emission compliance test for PM emissions was conducted on emissions unit P014 by Air Compliance Testing, Inc. on April 15, 2003.

15. SEDO reviewed the results from the April 15, 2003 emission compliance test and determined that the test was conducted in compliance with USEPA Test Methods 1 through 5. SEDO determined that the results of the test showed emissions unit P014 to be in compliance with permit terms and conditions for PM emissions with tested PM emissions of 0.0017 gr/dscf. SEDO informed Respondent of the results of the test review in a letter dated June 19, 2003.

16. On April 30, 2003, SEDO inspected Respondent's facility. At that time, the inspector observed visible fugitive PM emissions from the operation of equipment supporting emissions unit P014, in violation of Respondent's PTI and Title V permit terms and conditions. Specifically, visible fugitive PM emissions were observed during truck loading from the lime silo, from the lime silo bin vent, and during the loading of a pneumatic trailer at the roaster feed loading station of emissions unit P014. The inspector verbally notified Respondent of these violations at the time of the inspection.

17. In response to the observations made during the April 30, 2003, inspection, on May 8, 2003, Respondent sent a letter to SEDO and described the maintenance and repair work that was conducted on emissions unit P014 and stated that all emission control equipment was operational.

18. On July 20, 2003, Respondent submitted its quarterly excess emissions report for emissions unit P014 for the second calendar quarter of 2003 (i.e., April 1, 2003 through June 30, 2003). In this report, Respondent reported that operation of emissions unit P014 exceeded the applicable SO_2 emission limit on 38 separate days.

19. In a letter sent to SEDO on September 4, 2003, Respondent submitted a compliance plan and schedule to correct the SO_2 emission limit exceedances of emissions unit P014. The plan addressed a series of problems that Respondent had identified in the design and fabrication of the FGD unit as possible causes of the SO_2 emission violations during operation of the unit. Areas to be examined included the lime feed system, raw material feed, and the addition of calcium chloride injection to the scrubber system. Other options to correct the operational problems included a study of causes of reactor surging and an examination of the airflow through the entire process. A schedule to implement the corrective actions was also submitted. Respondent committed to beginning all corrective actions by January 20, 2004.

20. On October 14, 2003, Respondent submitted its first progress report to SEDO regarding the compliance plan submitted on September 4, 2003. Subsequent progress reports were submitted to SEDO on November 17 and December 18, 2003, and on January 16, February 20, and March 10, 2004. These reports described Respondent's progress towards the goals identified in the plan and noted any changes in the proposed

time line to return emissions unit P014 to compliance.

21. On October 22, 2003, Respondent submitted its quarterly excess emissions report for emissions unit P014 for the third calendar quarter of 2003 (i.e., July 1, 2003 through September 30, 2003). In this report, Respondent reported that operation of emissions unit P014 exceeded the applicable SO_2 emission limit on 25 separate days.

22. On November 26, 2003, SEDO sent an NOV to Respondent, noting the violations of the Title V permit terms and conditions for emissions unit P014. Specifically, SEDO cited the second and third quarter 2003 quarterly excess emissions reports, noting that the emissions unit had not been in compliance with its SO_2 emission limit of 78.1 pounds per hour for 43% of the unit's operating time during the third quarter and 14% of the unit's operating time in the fourth quarter. SEDO requested that, within 14 days of receipt of the NOV, Respondent provide an outline of the actions Respondent would take to return emissions unit P014 to full compliance by no later than December 31, 2003.

23. In a letter dated December 16, 2003, Respondent replied to SEDO's November 26, 2003 NOV. Respondent acknowledged that emissions unit P014 continued to have problems complying with its permit limit for SO_2 emissions and stated that it would be unable to comply with SEDO's proposed compliance date. Respondent provided background information regarding the history of problems with the FGD unit, including legal issues with the equipment supplier due to the failure of the unit to adequately control SO_2 emissions. Respondent described operational measures it had taken to date to reduce SO_2 emissions, including reducing the average process weight rate by 25%. Respondent also stated that due to the nature of emissions unit P014's process equipment (i.e., a rotary hearth), it takes approximately two and one-half hours after process shutdown before all emissions are released from the unit. Respondent proposed a new compliance schedule that listed four projects designed to return emissions unit P014 to compliance with the permit terms and conditions by June 12, 2004.

24. On January 29, 2004, Respondent submitted its quarterly excess emissions report for emissions unit P014 for the fourth calendar quarter of 2003 (i.e., October 1, 2003 through December 31, 2003). In this report, Respondent reported that operation of emissions unit P014 exceeded the applicable SO_2 emission limit on 46 separate days.

25. On April 28, 2004, Respondent submitted its quarterly excess emissions report for emissions unit P014 for the first calendar quarter of 2004 (i.e., January 1, 2004, through March 31, 2004). In this report, Respondent reported that emissions unit P014 operated a total of 84,960 minutes during the reporting period and exceeded the applicable SO_2 emission limit a total of 1,160 minutes during the reporting period. Therefore, SO_2 emissions from emissions unit P014 were noncompliant for only 1.38% of the total operating time period.

26. On June 29, 2004, Respondent had its annual quality assurance Relative Accuracy Test Audit ("RATA") testing conducted on the CEMS for SO_2 for emissions unit P014, as required by 40 CFR, Part 60, Appendix F. Ten test runs were performed during operations of emissions unit P014 at greater than 50% of its rated capacity using USEPA

standard methods and performance specifications to determine the relative accuracy of the CEMS associated with emissions unit P014. Relative accuracy was determined for SO_2 mass emission rate, SO_2 concentration, and volumetric flow rate. Based on the results of the test, as reported by Respondent to Ohio EPA on August 5, 2004, the CEMS associated with emissions unit P014 meets the requirements of 40 CFR, Part 60, Appendices B and F.

27. On July 28, 2004, Respondent submitted its quarterly excess emissions report for emissions unit P014 for the second calendar quarter of 2004 (i.e., April 1, 2004, through June 30, 2004). In this report, Respondent reported that emissions unit P014 operated a total of 66,240 minutes during the reporting period and exceeded the applicable SO_2 emission limit a total of 1,158 minutes during the reporting period. Therefore, SO_2 emissions from emissions unit P014 were noncompliant for only 2.10% of the total operating time period.

28. During the third quarter of 2004, Respondent reported malfunctions to Ohio EPA that resulted in exceedances of the applicable SO_2 emission limit for emissions unit P014 that occurred on July 3, July 6, July 14, August 2, August 13, and August 14, 2004, for a total of 1,012 minutes.

29. Based on the above Findings, the Director of Ohio EPA finds that Respondent violated the following OAC rules and ORC laws:

a. OAC Rule 3745-18-06(E), by exceeding the applicable SO_2 emission limit for emissions unit P014, as derived from the equation defined in OAC Rule 3745-18-06(E)(2);

b. ORC § 3704.05(C), for not complying with the terms and conditions specified in the facility's PTI (i.e., PM and SO_2 emission limits and no visible PM emission limit); and

c. ORC § 3704.05(J)(2), for not complying with the applicable requirements of the facility's Title V permit (i.e., PM and SO_2 emission limits and no visible PM emission limit).

30. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with the following Orders and their relation to benefits to the people of the State to be derived from such compliance.

V. ORDERS

The Director hereby issues the following Orders:

1. Within thirty (30) days after the effective date of these Orders, Respondent shall pay the amount of one hundred and three thousand five hundred dollars ($103,500) to Ohio EPA in settlement of Ohio EPA's claim for civil penalties, which may be assessed

pursuant to ORC § 3704.06(C). Payment shall be made by an official check made payable to "Treasurer, State of Ohio" and shall be submitted to Brenda Case, or her successor, with a letter identifying the Respondent, and emissions unit P014, to:

Ohio EPA, Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049

A copy of the check shall be sent to James A. Orlemann, Assistant Chief, Compliance and Enforcement, or his successor, at the following address:

Division of Air Pollution Control
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

2. Respondent shall maintain emissions unit P014 in compliance with the SO_2 emission limitation established by the terms and conditions of its Title V permit of 78.1 pounds per hour, as a three-hour rolling average, at all times except for the trial periods identified in Order 4. Compliance with this emission limitation shall be demonstrated by the data collected and recorded by the CEMS installed on emissions unit P014 per the requirements of the terms and conditions of Respondent's Title V permit.

3. Except as otherwise provided below, Respondent shall not operate emissions unit P014 above a process rate weight, as defined in Order 6, of eighty (80) tons per day at any time.

4. Operation at a higher process weight rate is permissible only for trial periods for the purpose of demonstrating compliance with the SO_2 emission limitation of 78.1 pounds per hour, as a three-hour rolling average (per Respondent's Title V permit), at a higher process weight rate. Respondent shall notify SEDO at least thirty (30) days in advance of any planned compliance demonstration. Each notification to SEDO shall provide the dates of the trial period, a description of any modifications to the controls and/or process which would demonstrate to Ohio EPA that there is a technical basis that compliance with the emission limitation is likely to be shown at the higher process weight rate, and the estimated length of time of the trial period with a justification for the proposed time period. Respondent shall report the results of the trial demonstration within thirty (30) days of the end of the trial period. This report shall include CEMS data showing SO_2 emissions and records of the daily process weight rate ("PWR"), as defined in Order 5, for emissions unit P014, as well as a summary of any changes to the controls and/or process during the trial period.

5. Respondent may request an increase in the allowable PWR (as set forth in Order 3) of greater than eighty (80) tons per day but less than one hundred (100) tons per day (i.e., less than the maximum PWR for emissions unit P014). Such a request shall be made to Ohio EPA in writing, specifying the requested PWR increase and shall be justified based on the results of the trial demonstrations described in Order 4.

6. Respondent shall monitor and record the PWR, in tons per day, of material input into the roaster of emissions unit P014 when it is in operation. For the purposes of these Orders, the PWR is defined as Respondent's "Official Production Rate" for emissions unit P014, which is calculated as described in Attachment A to these Findings and Orders. Respondent shall maintain these records on site at the Southgate Road facility located in Cambridge, Ohio and retain the records until such time as these Orders terminate. Respondent, upon verbal or written request, shall furnish copies of these records to Ohio EPA, or its authorized representative. Until such time as these Orders are terminated (as described in Order 8), Respondent shall submit reports to SEDO within fifteen (15) days following the end of each calendar month reporting each exceedance of the PWR limit of Order 3 during the calendar month. If no exceedance has occurred during the calendar month, Respondent shall state in the report that no exceedance occurred during the calendar month.

7. By April 4, 2005, Respondent shall purchase, install, and operate an alternative lime feed system for the FGD unit for emissions unit P014, as described in its "Roaster Compliance Plan Progress Report," dated August 11, 2004, for the purpose of further minimizing any malfunctions of emissions unit P014 due to the lime feed system, which result in exceedances of the SO_2 emission limitation of 78.1 pounds per hour, as a three-hour rolling average.

8. Orders 2 through 6 shall terminate at such time when one of the following actions occur:

a. Respondent demonstrates by emission measurements acceptable to Ohio EPA that compliance with the SO_2 emission limitation has been achieved at the maximum PWR (i.e.,100 tons per day) of emissions unit P014.

b. The Title V permit, PTI, and/or Permit to Operate (if applicable) provide a PWR restriction for emissions unit P014 that will maintain compliance with the applicable SO_2 emission limitation.

c. The permanent shutdown of emissions unit P014 or the modification of emissions unit P014 in accordance with the requirements of OAC Chapter 3745-31.

d. Upon petition by the Respondent pursuant to the termination section of these Orders and subsequent approval by Ohio EPA.

VI. TERMINATION

Except as otherwise provided in Order 8, Respondent's obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and the Chief of Ohio EPA's Division of Air Pollution Control acknowledges, in

writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete."

This certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is the person authorized to sign in OAC Rule 3745-35-02(B)(1) for a corporation or a duly authorized representative of Respondent as that term is defined in the above-reference rule.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to, Respondent's operation of the facility specified in these Orders.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state, and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to the Respondent.

IX. MODIFICATIONS

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

X. NOTICE

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to :

Ohio Environmental Protection Agency
Southeast District Office
Division of Air Pollution Control
2195 Front Street
Logan, Ohio 43138
Attention: Kay Gilmer, Manager

and to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049
Attention: Thomas Kalman, Manager, Enforcement Section

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

XI. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges, and causes of action, except as specifically waived in Section XII of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation, or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for the Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and the Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated, or modified.

XIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

IT IS SO ORDERED AND AGREED:

Ohio Environmental Protection Agency

Christopher Jones
Director

10-20-04
Date

IT IS SO AGREED:

Shieldalloy Metallurgical Corporation

Signature

14 Oct 04
Date

Hoy E. Frakes, Jr
Printed or Typed Name

Sr. Vice President & GM
Title

ATTACHMENT A

Emissions Unit P014-Roaster Process Weight Rate Determination

1. Roaster Feed Pit Loading Procedure

   a. Raw material is loaded into dump truck.

   b. The Dump Truck Operator weighs dump truck using a calibrated scale. The loaded weight is entered on the Material Flow Ticket.

   c. The Dump Truck Operator transports raw material to roaster. The material is dumped at feed pit only with the Roaster Operator's approval.

   d. The Dump Truck Operator weighs the empty dump truck using the same calibrated scale to obtain the tare weight. The tare weight is entered on the Material Flow Ticket.

   e. The Dump Truck Operator submits the Material Flow Ticket to the Inventory Control Clerk. The Material Flow Ticket is maintained on file for three months.

2. Roaster Production Reporting Procedure

   a. The Inventory Control Clerk visually inspects each of the four material storage bins (i.e., Hoppers #1 through #4) to determine the amount of material in each bin. This inspection is conducted each operating day at 2:00 p.m.

   b. The Inventory Control Clerk records the percentage of bin volume that contains material for each bin on the Daily Roaster Hopper Estimate Form. Based on the density of the raw material, each bin has a 52,000 pound material storage capacity. The weight of the material in the bin is estimated by applying the estimated bin volume percentage to the maximum material storage capacity (i.e, for example, a bin that is estimated to be 50% full would be assumed to contain 26,000 pounds of raw material).

   c. The Inventory Control Clerk copies the previous day's inventory on to the Daily Roaster Hopper Estimate Form.

   d. The Inventory Control Clerk sums the total weight transferred to the roaster feed building using the Material Flow Tickets.

   e. The Inventory Control Clerk adds the previous day's inventory to the deliveries, then subtracts the remaining estimated inventory to determine daily process weight rate. This amount, in pounds, is entered on the Daily Roaster Hopper Estimate Form.

f. The Inventory Control Clerk posts the roaster process weight rate to the Roaster Production Worksheet.

g. The Inventory Control Clerk communicates the roaster process weight rate to the Roaster Supervisor and cross-checks the result against roaster output for validity. The Inventory Control Clerk then notifies the Production Clerk of the results.