

IOWA DEPARTMENT OF NATURAL RESOURCES
National Pollutant Discharge Elimination System (NPDES) Permit

PERMITTEE

HAWKEYE ALUMINUM COMPANY (HALCO)
P.O. BOX 7653
DAVENPORT, IA 52818

IDENTITY AND LOCATION OF FACILITY

HAWKEYE ALUMINUM COMPANY (HALCO)
Section 32, T 87N, R 4E
SCOTT County, Iowa

IOWA NPDES PERMIT NUMBER: 7167099

RECEIVING STREAM

MISSISSIPPI RIVER

DATE OF ISSUANCE: 09-01-1992

DATE OF EXPIRATION: 09-01-1997

**YOU ARE REQUIRED TO FILE FOR
RENEWAL OF THIS PERMIT BY:** 03-01-1997

EPA NUMBER: IA0003935

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C. 1342(b)), Iowa Code section 455B.174, and rule 567-64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements, and other terms set forth in this permit.

You may appeal any conditions of this permit by filing a written notice of appeal and request for administrative hearing with the director of this department within 30 days of your receipt of this permit.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this Iowa NPDES operation permit.

FOR THE DEPARTMENT OF NATURAL RESOURCES

Martha J. Larson, Director

By Frank Weston

Frank Weston, Supervisor
Wastewater Permits Section

ENVIRONMENTAL PROTECTION DIVISION

OUTFALL SERIAL NO.	DESCRIPTION
001	Storm water, process water from Cold Rolling operations and plant-wide usage process water. Normally zero flow except for storm runoff.
002	Storm water, process water from Foil Rolling and Sheet Finishing operations and plant-wide usage process water, treated effluent from perchloroethylene air pollution control device. Normally zero discharge except for storm runoff.
003	Storm water, process water from Cold Rolling, Foil Rolling and Foil Laminating operation, and plant-wide usage process water. Normally zero flow except for storm runoff.
004	Storm water, process water from Hot Rolling operations and plant-wide usage process water and mill water reclamation systems. Normally zero discharge of process water.
005	Storm water, process water from Hot Rolling operations, plant-wide usage process water, batch discharge of neutralized waste water from the regeneration cycle of a demineralized water production facility. Normally zero discharge except for storm runoff.
006	Storm water, contact process water from ingot casting, plant-wide usage process water, batch discharge from ingot etching operation and blowdown from cooling tower.
007	Blowdown from the river water treatment plant which is combined with outfall 004 process water prior to discharge to the river.
008	Total plant discharge from outfalls 001, 002, 003, 004, 005, and 006.

EFFLUENT LIMITATIONS FOR CONTINUOUS DISCHARGE FACILITIES

You are prohibited from discharging pollutants more frequently or in excess of the limitations specified below:

OUTFALL SERIAL NUMBER	WASTEWATER PARAMETER	MASS IN POUNDS PER DAY (unless otherwise specified)		CONCENTRATION IN mg/l (unless otherwise specified)	
		Average	Maximum	Average	Maximum
001, 002	pH (Range)	6.0 Minimum - 9.0 Maximum			
003, 004 005, 006	Temperature	110° F Maximum (April 1 - Oct 31) 85° F Maximum (Nov 1 - March 31)			
(801)	Total Suspended Solids*	8,140	17,117	—	—
	Oil & Grease*	5,010	8,350	—	—
	Aluminum Total*	432	650	3.5	5.2
	Arsenic Total	17.56	26.50	0.07	0.11
	Cadmium Total	49.50	74.45	0.20	0.30
	Chromium Total	34	59	0.16	0.24
	Copper Total	37.60	56.39	0.15	0.23
	Cyanide Total	23	45	0.12	0.18
	Lead Total	132	198	0.53	0.80
	Mercury Total	0.26	0.40	0.0010	0.0016
	Nickel Total	3337	5004	13.50	20.20
	Phenols	257	385	10.40	15.60
	Selenium Total	116	174	0.47	0.70
	Silver Total	43.78	65.54	0.18	0.26
	Zinc Total*	113	270	1.34	2.00
	Tetrachloroethene	—	1.80	—	—
PCB's Total				0.00003**	

* Mass limitations shall be based on net addition to the Mississippi River. Method of calculation is specified on page 6 of this NPDES permit. A discharge will not be considered a violation of a water quality basis effluent limit if the permittee can demonstrate that the pollutant in question was present in the incoming river water at a concentration as great or greater than measured in the outfall during compliance monitoring.

** Compliance monitoring for PCB shall be done using EPA Method 608 with results reported to a detection limit of 0.5 PPb. All monitoring results reported as less than 0.5 (<0.5 PPb) will be considered to be in compliance with this permit.

MONITORING AND REPORTING REQUIREMENTS FOR CONTINUOUS DISCHARGE FACILITIES

- (a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.
- (b) Analytical and sampling methods as specified in 40 CFR Part 136 or Table VII of Chapter 63 of the rules, or other methods approved in writing by the department, shall be utilized.
- (c) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.
- (d) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. Also, flow data shall be reported in million gallons per day (MGD).
- (e) Results of all monitoring shall be recorded on forms provided or approved by the department, and submitted to the department by the fifteenth day following the close of the reporting period. Your reporting period is on a monthly basis, ending on the last day of each month.
- (f) Lack of operation of lift stations on outfalls 001, 002, 003, 004 and/or 005, shall not be considered reportable bypass if water discharged as a result of lift stations being down is included in routine sampling program and results are included for outfall 801 in the monthly report to IDNR.

OUTFALL NUMBER	WASTEWATER PARAMETER	SAMPLE FREQUENCY	SAMPLE TYPE	MONITORING LOCATION
001	Flow	1/week	Measurement	Final Effluent
001	pH (Minimum - Maximum)	1/week	Grab	Final Effluent
001	Temperature	1/week	Grab	Final Effluent
002	Flow	1/week	Measurement	Final Effluent
002	pH (Minimum - Maximum)	1/week	Grab	Final Effluent
002	Temperature	1/week	Grab	Final Effluent
003	Flow	1/week	Measurement	Final Effluent
003	pH (Minimum - Maximum)	1/week	Grab	Final Effluent
003	Temperature	1/week	Grab	Final Effluent
004	Flow	1/week	Measurement	Final Effluent
004	pH (Minimum - Maximum)	1/week	Grab	Final Effluent
004	Temperature	1/week	Grab	Final Effluent
005	Flow	1/week	Measurement	Final Effluent
005	pH (Minimum - Maximum)	1/week	Grab	Final Effluent
005	Temperature	1/week	Grab	Final Effluent
006	Flow	1/week	Measurement	Final Effluent
006	pH (Minimum - Maximum)	1/week	Grab	Final Effluent
006	Temperature	1/week	Grab	Final Effluent

MONITORING AND REPORTING REQUIREMENTS FOR CONTINUOUS DISCHARGE FACILITIES (cont'd)

OUTFALL NUMBER	WASTEWATER PARAMETER	SAMPLE FREQUENCY	SAMPLE TYPE	MONITORING LOCATION
801	Flow	1/week	Measurement	Final Effluent
801	Total Suspended Solids	1/week	Grab	Final Effluent
801	Total Suspended Solids	1/week	Grab	River Water Intake
801	Aluminum Total (AL)	1/week	Grab	Final Effluent
801	Aluminum Total (AL)	1/week	Grab	River Water Intake
801	Arsenic Total (AS)	1/month	Grab	Final Effluent
801	Barium Total (BA)	1/week	Grab	Final Effluent
801	Cadmium Total (CD)	1/month	Grab	Final Effluent
801	Chromium Total (CR)	1/week	Grab	Final Effluent
801	Chromium Total (CR)	1/week	Grab	River Water Intake
801	Copper Total (CU)	1/month	Grab	Final Effluent
801	Cyanide Total (CN)*	1/week	Grab	Final Effluent
801	Cyanide Total (CN)*	1/week	Grab	River Water Intake
801	Fluoride Total (FL)	1/month	Grab	Final Effluent
801	Lead Total (PB)	1/month	Grab	Final Effluent
801	Mercury Total (HG)	1/month	Grab	Final Effluent
801	Nickel Total (NI)	1/month	Grab	Final Effluent
801	Oil and Grease	1/week	Grab	Final Effluent
801	Oil and Grease	1/week	Grab	River Water Intake
801	Phenols	1/month	Grab	Final Effluent
801	Selenium Total (SE)	1/month	Grab	Final Effluent
801	Silver Total (AG)	1/week	Grab	Final Effluent
801	Zinc Total (ZN)	1/week	Grab	Final Effluent
801	Zinc Total (ZN)	1/week	Grab	River Water Intake
801	Tetrachloroethene (Tetrachloroethylene)	1/2 weeks	Grab	Final Effluent
801	PCBS (Total) **	1/week	Grab	Final Effluent

* Weekly sampling for Cyanide is not required if the first wastewater sample of each calendar year, for each outfall, has been analyzed and found to contain less than 0.07 mg/l Cyanide. The results of this analysis must be reported. If this sample contains less than 0.07 mg/l Cyanide the permittee may certify in writing on the monthly operation report that Cyanide is not and will not be used in the Aluminum Forming Process in lieu of weekly testing.

** Compliance monitoring for PCB shall be done using EPA Method 608 with results reported to a detection limit of 0.5 PPb. All monitoring results reported as less than 0.5 (<0.5 PPb) will be considered to be in compliance with this permit.

DISCHARGE CALCULATIONS

Total Plant discharge rates shall be determined using the following equations:

Net Mass-based Discharge Calculations:

$$M_n = \sum M_o$$

where:

M_n = Net discharge from the Plant in lb/day

M_o = Net discharge from each flowing outfall in lb/day

$$M_o = (P_o - P_1) (F_o) (0.012)$$

where:

P_o = Parameter concentration in outfall in mg/l

P_1 = Parameter concentration in mill water supply

F_o = Flow in outfall in gallons per minute

0.012 = constant

Net Concentration Discharge Calculations:

$$C_o = M_n \div [F_t \times .012]$$

where:

C_o = average parameter concentration for total plant discharge in mg/l

M_n = Net discharge of parameter from total plant in lb/day

F_t = Total flow from plant in gallons per minute

$$F_t = \sum F_o$$

STANDARD CONDITIONS

1. DEFINITIONS

- (a) 7 day average means the sum of the total daily discharges by mass, volume or concentration during a calendar week, divided by the total number of days during the week that measurements were made.
- (b) 30 day average means the sum of the total daily discharges by mass, volume or concentration during a calendar month, divided by the total number of days during the month that measurements were made.
- (c) daily maximum means the total discharge by mass, volume or concentration during a twenty-four hour period.

2. DUTY TO COMPLY

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of the facility. (See 40 CFR 122.41(a) and 567-64.3(11) IAC)

3. DUTY TO REAPPLY

If you wish to continue to discharge after the expiration date of this permit, you must file an application for reissuance at least 180 days prior to the expiration date of this permit. (See 567-64.7(1) IAC)

4. NEED TO HALT OR REDUCE ACTIVITY

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (See 567-64.6(5)(j) IAC)

5. DUTY TO MITIGATE

You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. (See 567-64.6(5)(l) IAC)

6. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or any exclusive privileges.

7. TRANSFER OF TITLE

If title to your facility or any part of it is transferred the new owner shall be subject to this permit. You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The Director shall be notified in writing within 30 days of the transfer. (See 567-64.13 IAC)

8. PROPER OPERATION AND MAINTENANCE

All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility, shall be retained at all times and adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit. (See 40 CFR 122.41(e) and 567-64.6(5)(f) IAC)

9. DUTY TO PROVIDE INFORMATION

You must furnish to the Director, within a reasonable time, any information the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to the Director upon request, copies of any records required to be kept by this permit.

10. MAINTENANCE OF RECORDS

You are required to maintain records of your operation in accordance with 567-63.2 IAC.

11. PERMIT MODIFICATION, SUSPENSION OR REVOCATION

- (a) This permit may be modified, suspended or revoked and reissued for cause including but not limited to those specified in 567-64.3(11) IAC.
- (b) This permit may be modified due to conditions or information on which this permit is based, including any new standard this department may adopt that would change the required effluent limits.
- (c) If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards. (See 567-64.6(5)(g) IAC)

The filing of a request for a permit modification, revocation or suspension, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

12. SEVERABILITY

The provisions of this permit are severable and if any provision or application of any provision to any circumstance is found to be invalid by this Department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.

STANDARD CONDITIONS

13. INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES

You are required to permit authorized department personnel to:

- (a) Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit.
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- (c) Inspect at reasonable times any facilities, equipment, practices or operations regulated or required under this permit.
- (d) Sample or monitor at reasonable times for the purpose of assuring compliance or as otherwise authorized by the Clean Water Act.

14. TWENTY-FOUR HOUR REPORTING

You shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a re-occurrence of the noncompliance must be provided within 5 days of the occurrence. The following instances of noncompliance must be reported within 24 hours of occurrence:

- (a) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.44(g))
- (b) Any upset which exceeds any effluent limitation in the permit. (See 40 CFR 122.44(n))
- (c) Any violation of a maximum daily discharge limit for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g))

The requirement to submit a written report may be waived on a case-by-case basis at the time of the oral report.

15. OTHER NONCOMPLIANCE

You shall report all instances of noncompliance not reported under condition # 14 at the time monitoring reports are submitted.

16. ADMINISTRATIVE RULES

Rules of this Department which govern the operation of your facility in connection with this

permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-64 and 120-122. Reference to the term "rule" in this permit means the designated provision of Part 567 of the Iowa Administrative Code.

17. NOTICE OF CHANGED CONDITIONS

You are required to report any changes in existing conditions or information on which this permit is based:

- (a) Facility expansions, production increases or process modifications which may result in new or increased discharges of pollutants must be reported to the Director in advance. If such discharges will exceed effluent limitations, your report must include an application for a new permit. (See 567-64.6(5)(a) IAC)
- (b) If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written permit from this Department. (See 567-64.2 IAC)
- (c) If your facility is a publicly owned treatment works or otherwise may accept waste for treatment from industrial contributors see 567-64.3(5) IAC for further notice requirements.
- (d) You shall notify the Director as soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit. (See 40 CFR 122.42(a))

You must also notify the Director if you have begun or will begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

18. OTHER INFORMATION

Where you become aware that you failed to submit any relevant facts in a permit application or submitted incorrect information in such facts or information.

STANDARD CONDITIONS

19. UPSET PROVISION

- (a) Definition—"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph C of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance is final, administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset to the Department in accordance with 40 CFR 122.41(l)(6)(ii)(B).
 - (4) The permittee complied with any remedial measures required by item # 5 of the Standard Conditions of this permit.
- (d) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

20. BYPASSES

- (a) Definition—"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(b) Notice.

- (1) Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 - (2) Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required in condition # 14.
- (c) Prohibition of bypass. Bypass is prohibited and the Department may take enforcement action against a permittee for bypass unless:
- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance;
 - (3) The permittee submitted notices as required by paragraph "d" of this section.
- (d) The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above.
- (e) Reporting bypasses. Bypasses shall be reported in accordance with 567.63.5 IAC.

21. SIGNATORY REQUIREMENTS

Applications, reports or other information submitted to the Department in connection with this permit must be signed and certified as required by 567-64.3(8) IAC.

