AR-4 (Redacted)

(Information not pertaining to Tentative Decision on ArcelorMittal Cleveland CWA 301(g) Variance Request has been redacted)

LTV Steel Company

March 26, 1985

Mr. Gary A. Amendola
U.S. Environmental Protection Agency
Region V
Eastern District Office
25089 Center Ridge Road
Westlake, Ohio 44145

Re: 301(g) Variance Reports

Dear Mr. Amendola:

Attached are the discharge characteristics for the following LTV Steel Company plants and outfalls as requested in your letter of January 18, 1985 to Mr. Leonard Wisniewski:

Plant	Outfall
Cleveland Works (Republic) Cleveland, Ohio OH0000957	005, 014

Velocity for Cleveland outfalls 014 and 005 are based on calculated velocities through the Parshall flume throats and are given as maximum expected values.

If you have any questions please call me at 622-6539.

W. B. Bredbeck

W. B. Bredbeck
Environmental Management Engineer

WBB/dh
Attachments
0503b
cc: C. Broman (w/att.)
T. J. Kachur "
R. L. Nemeth "
L. D. Wisniewski "

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CLEVELAND EAST (REPUBLIC)

OUTFALL 005

DISCHARGE AND RECEIVING WATER CHARACTERISTICS

Discharge (high production, summer period)	005	
Flow rate, m^3/sec	3.47	
Width, m	1.83	Round pipe free discharge
Depth, m	.780	
Velocity, m/sec	3.25	
Temperature, °C	31.7°	
Discharge direction relative to ambient current, degrees	90°	

Receiving Water at Discharge Point (low flow design conditions)

Flow rate, m^3/sec (excluding discharge)	_____
Ambient Velocity, m/sec	_____
Ambient Temperature, °C	_____
Salinity, 0/00	_____

If discharge is submerged, so indicate.

CLEVELAND EAST (REPUBLIC)

OUTFALL 014

DISCHARGE AND RECEIVING WATER CHARACTERISTICS

Discharge (high production, summer period)

Flow rate, m^3/sec	2.37
Width, m	2.43
Depth, m	.373
Velocity, m/sec	2.45
Temperature, °C	31.7°
Discharge direction relative to ambient current, degrees	90°

Receiving Water at Discharge Point (low flow design conditions)

Flow rate, m^3/sec (excluding discharge)	
Ambient Velocity, m/sec	
Ambient Temperature, °C	
Salinity, 0/00	

If discharge is submerged, so indicate.

Discharge is through twin rectangular tunnels with a combined width of 4.42m. Depth is dependent on river levels. Measurements are given for the Parshall flume located about 100' upstream from the river. Velocity is a maximum value assuming free flow with submergence of 70% or less.

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