

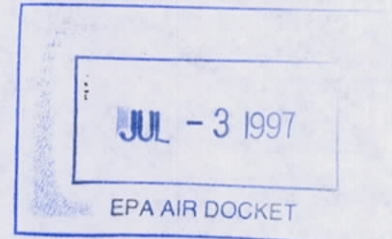


RESEARCH TRIANGLE INSTITUTE

Center for Environmental Analysis

February 28, 1992

Mr. Jim Maysilles
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
ISB/MD-13
Research Triangle Park, NC 27711



Dear Jim:

This letter presents the current findings of State and local regulations regarding HCl emissions from steel pickling operations.

The EPA's National Air Toxics Information ClearingHouse (NATICH) and BACT/LEAR Information System (BLIS) databases were searched for steel pickling facilities that have reported HCl emissions. The NATICH database contains permitting and source testing information that was submitted by State or local agencies. The BLIS database stores permitting information for new sources that are required to meet BACT standards. Hydrochloric acid and the SICs that are related to steel pickling were used to search the databases.

No facility was identified in the BLIS database, but a number of facilities were identified in the NATICH database. Unfortunately, the NATICH database shows only permit No. or NATICH access No., but no facility name or address. Therefore, RTI contacted the State or local agencies and forwarded these permit numbers to the governing agency with a request for available information pertaining to permitting or source testing.

The second source of facility names for continuous pickling operations is the list of continuous pickling roundup published in 33 Metal Producing in May 1991. The third source of facility names for steel pickling operations is the Toxic Chemical Release Inventory (TRI) database. Using HCl and a list of selected SICs, a number of facilities emitting HCl were identified from TRI database. The names of the facilities that operate a continuous or push-pull pickling line were forwarded to individual State/local agencies for permitting or source testing information.

The Environmental Reporter published by the Bureau of National Affairs, Inc. in Washington D.C. was reviewed to identify State regulations pertaining to HCl emissions from steel pickling operations. RTI only reviewed the air pollution control regulations for those States where the identified facilities are located. The current findings of State regulations, permitting

information, and source testing information are summarized in Table 1 for States whose information has been collected or received.

The available information indicated that new sources constructed in the last few years generally require a construction permit and an operating permit. HCl emissions, either as particulate matter or as HCl, are specified in the permits. Compliance tests are performed to verify the actual HCl emissions. A few tests used EPA Method 26 for HCl emission determination. They are noted in the summary table.

As more data are received from the State and local agencies, the following table will be updated and reported to you. If you have any suggestions, please do not hesitate to contact me at 990-8623.

Sincerely yours,

Emery J. Kong

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cc: Jim Turner, RTI
Dave Coy, RTI

File 5225-03

Table 1. Summary of Current Findings of State Regulations, Permitting, and Source Testing Information for HCl Emissions from Steel Pickling Operations

State/Local Agency and Contact	Findings
<p>Alabama Alabama Dept. of Environmental Management, Mr. George Sullivan, (205) 271-7861</p>	<p>Alabama adopted existing Federal NESHAP regulations as the State regulations. They are looking for information regarding Gulf States Steel and will forward it to RTI if available.</p>
<p>Alabama Jefferson County Department of Health, Air Pollution Control, Mr. Henry Burnette, (205)933-9110</p>	<p>The County office does not have any test data for USX at Fairfield Works, but they will check into permitting and regulatory information.</p>
<p>California South Coast Air Quality Management District. (714) 396-2000 Bay Area Air Quality Management District, Ms. Rochelle Walker, (415)771-6000</p>	<p>California Air Pollution Control Regulations require facilities that use or emit any chemicals in a listed substances to provide an emission inventory plan and an emission inventory report. The emission inventory report also includes stack, process, and control device information. Emission inventory reports for 4 facilities in California are being requested from two district offices. California requires California Air Resource Board (CARB) Method 421 be used for the determination of HCl emissions from stationary sources.</p>

<p>Indiana Dept. of Environmental Management, Mr. Mike Dicen, (317)232-8458</p>	<p>Indiana adopted the existing Federal NESHAP regulations as their emission standards for hazardous air pollutants. Based on information for two new steel pickling facilities, HCl emissions are being regulated or measured as particulate matter. RTI contacted the State agency for updated information on Worthington Steel at Porter, Nucor Steel at Crawfordsville, and I/N Tek at New Carlisle. No information has been received. RTI will continue follow up.</p>
<p>Illinois Illinois EPA, Dept. of Air Pollution Control, Mr. Jim Ross, (217)785-0768</p>	<p>Emissions from pickling operations are currently considered as particulate mist and regulated under 35 Illinois Administrative Code 212.321 and 212.322. Illinois EPA provided RTI a 1968 test result for a Heil #739 packed scrubber used at National Steel, Granite City Steel Division for HCl emission control. Results of the test showed that the scrubber had a 99.58% removal efficiency for HCl. No other testing data were identified for other steel pickling facilities in Illinois.</p>
<p>Kentucky Division of Air Quality, Mr. James W. Dills, (502)564-3382</p>	<p>Kentucky specified an HCl threshold ambient limit and an HCl significant emission level for existing and new/modified sources in the air pollution control regulations (401 KAR 63:021 and 63:022). For controlling toxic air pollutant emissions, reasonably available control technologies are required for existing sources; however, best available control technologies are required for new or modified sources. The State Agency provided one operating permit and one construction permit for two wire processing firms. HCl emission limits were specified on the recent construction permit issued in 1990, while PM emission were used in the operating permit issued in 1988.</p>

<p>Maryland Department of the Environment, Air Management Administration, Mr. Carl Rivkin, (301)631-3230</p>	<p>Maryland air pollution control regulations have a section (26.11.15) pertaining to toxic air pollutants. HCl is one of the Class II TAPs that are subject to TAP regulations. Any installation or source that discharges HCl into the ambient air is required to obtain a permit. A facility is required to quantify emissions and to meet the best available control technology (BACT) requirements for air toxics emission. The State agency provided RTI a construction permit information for HS Processing Company in Baltimore. The construction permit states that according to COMAR 26.11.15.06, the regulation prohibits the discharge of toxic air pollutants to the extent that the emissions endanger human health. But the permit did not specify an allowable emission quantity for HCl.</p>
<p>Michigan Wayne County Air Pollution Control Division, Mr. Howard Murry, (313)832-5000</p>	<p>Review of Michigan air pollution control rules did not reveal specific regulations regarding HCl emissions from steel pickling operations. RTI has contacted the local agency to review their files and send the information if found.</p>
<p>New York Department of Environmental Conservation, Div. of Air Quality, Mr. James Coyle, (518)457-5618</p>	<p>New York State does not have specific regulations regarding HCl emissions from steel pickling operations. The State directed RTI to various EPA Regional Offices for facilities in NY State.</p>
<p>Ohio Ohio EPA, Mr. Bruce Weinberg, (614)644-2270</p>	<p>Ohio State does not have specific regulations regarding HCl emissions from steel pickling operations; however, the facilities need some type of operating permit and the permit is renewed every 3 years. Mr. Weinberg is in the process of contacting their district and local offices for source testing information.</p>

<p>Pennsylvania Bureau of Air Quality Control, Mr. Douglas Leshner, (717)787-9702</p>	<p>The State agency provided RTI operating permits and a temporary operating permit for 4 steel pickling operations. The permits require the facility to operate the emission control device in such a manner as not to cause air pollution and in a manner consistent with good operating and maintenance practices, but no emission limits were specified on the permits.</p>
<p>Pennsylvania Allegheny County Health Dept., Bureau of Air Pollution Control, Mr. Lawrence Werner, (412)578-8127</p>	<p>The Allegheny County Health Department in Pennsylvania requires facilities to submit inventory reports for the annual air toxics survey. In the annual air toxics survey, it included some brief emission point parameters such as stack gas temperature, stack gas flow rate, and stack height. The County health department provided RTI with 1990 Air Toxic Survey results for 3 pickling operations in Allegheny County. From the Survey results, RTI requested test reports from Allegheny Ludlum Corp. and USX Irvin Plant. EPA Method 5 or Modified Method 5 were used in these two HCl emission tests.</p>
<p>Tennessee Metro. Health Department of Nashville and Davidson County, Mr. Rob L. Raney, (615)340-5653</p>	<p>Tennessee State issued an operating permit to Cargill Steel and Wire in Nashville. The permit specifies an HCl allowable emission of 0.73 lb/hr for the packed tower used for controlling HCl emissions from a pickling line. Source testing conducted at the scrubber showed an HCl emission rate of 0.02 lb/hr. The test was conducted on 4/30/91 using EPA Method 26 for HCl determination.</p>
<p>Texas Air Control Board, Mr. Monaco Banda, (512)908-1510</p>	<p>Available permitting information provided by Texas Air Control Board shows that only the opacity of emissions from scrubber exhaust is regulated not to exceed 20%, averaged over a 5-minute period.</p>
<p>Utah Division of Environmental Health Mr. Burnell Cordner (801)538-6121</p>	<p>Utah State adopted the existing Federal NESHAP regulations as their emission standards for hazardous air pollutants. An operating permit issued to Western Coil Processing in Lindon, UT in 1989 specified that the HCl stack emission shall not exceed 3 lb/hr.</p>

West Virginia
Air Pollution Control
Commission
Mr. Dale Farley
(304)348-4022

West Virginia has a section of regulations pertaining to the prevention and control of 14 toxic air pollutant emissions. However, HCl is not included in the TAP listing.