

# PTI Permit

**New Steel International, Inc. Site**



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**November 2007**



Ohio Environmental Protection Agency  
Wastewater Permit to Install (PTI)  
New Steel International, Inc Site

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**Permit-to-Install/Plan Approval Application**

**FOR AGENCY USE ONLY**

Date Received: / /	Application/Revenue ID:	Organization ID:
Document ID:	Place ID:	Check ID:
Check Date: / /	Check Number:	Check Amount:

**1. Project Name:** MMK - Americas

**2. Applicant** (see note after signature)

Name: New Steel International, Inc.  
 Mailing Address: 6730 Roosevelt Avenue  
 City: Franklin State: Ohio Zip: 45005  
 Contact Name: Michael L. Apgar President & COO  
 Title: Chairman & CEO  
 Phone: (513) 422-0100 Fax: (513) 422-4078 E-mail : \_\_\_\_\_

**3. Application/Plans Prepared by:**

Name: Lawhon & Associates  
 Mailing Address: 975 Eastwind Drive Suite 190  
 City: Westerville State: Ohio Zip: 43081  
 Contact Name: Shawn Ansbro  
 Title: Vice President, Technical Service  
 Phone: (614) 818-5200 Fax: (614) 818-5219 E-mail : sansbro@lawhon-assoc.com

**4. Billing Address** (if different than Applicant)

Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Phone: ( ) - Fax: ( ) - E-mail : \_\_\_\_\_

**5. Future Owner** (if different than Applicant)

Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Phone: ( ) - Fax: ( ) - E-mail : \_\_\_\_\_

**6. Project Location**

Street Address or Location Description: Gallia Pike

County: Scioto Township: Green

Municipality: Haverhill Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

Method of Determination: \_\_\_\_\_

**7. Brief Project Description:** Build a treatment facility located and used at a new steel manufacturing facility. Treatment facility will be built same time as steel mill. The facility will have two internal outfalls. One internal outfall will be from the cooling water and be designated as Outfall 601. The second outfall will be for the neutralization plant and be designated as Outfall 602. The internal outfalls 601 and 602 combine to form external outfall 001. Two form B5's are included, one for each internal outfall.

**8. Will one or more acres be disturbed during construction of this project?**  Yes  No

If Yes, enter the date the NOI for coverage under the construction storm water NPDES permit was submitted: 10/16/2007 and the date coverage was granted:  / /

**9 a. Is this application part of a combined permit-to-install application? (for example air + water)**  Yes  No

**b. Has an application for a Class V injection well permit been submitted?**  Yes  No  N/A

If Yes, date submitted:  / /

**10. Is this application for the construction or installation of a private sewage disposal system as specified by Ohio Revised Code (ORC) 6112.02?**  Yes  No

If Yes, have you applied for and obtained a certificate of public convenience and necessity from PUCO as specified by ORC 6112.03?  Yes  No

**11. Compliance Status**

**a. Does this facility or the facility this project will contribute to have an NPDES permit for a point source discharge? If Yes, list state and federal permit numbers:**  Yes  No

OH \*in process

**b. Is this application filed in compliance with findings and orders, a consent decree, and/or NPDES permit schedule?**  Yes  No

If Yes, effective date of the document containing the schedule:  / /

**12. Have pollution prevention concepts been considered for this project?**  Yes  No

If Yes, please describe (attach additional pages if necessary) See attached sheet.

**13. Estimated Project Schedule:**

Beginning construction date: 04/1/2008 Ending construction date: 02/28/2009 Beginning operation date: 08/28/2009

**14. Project Cost:**

Installation/Construction Cost: \$ \_\_\_\_\_ (Mark one):  Actual  Bid  Estimate

Annual Operation/Maintenance Cost (if applicable - this project only): \$ \_\_\_\_\_

Are Water Pollution Control Loan Funds going to be used for this project?  Yes  No

If No, Funding Source: \_\_\_\_\_

**15. Attachments**

The following are included in this application package (check appropriate box(es) and indicate how many copies of each are provided):

<input checked="" type="checkbox"/> Detail Plans	1 copy	<input type="checkbox"/> Management Plan	
<input type="checkbox"/> Soil Evaluation Report		<input type="checkbox"/> Engineering Report	
<input checked="" type="checkbox"/> Hydrogeologic Site Investigation Report	1 copy	<input type="checkbox"/> Engineering Specifications	
<input type="checkbox"/> Other (describe): _____			

**16. Form B Submission (check all that apply):**

- Sewer and Pump Station Construction – Form B1
- On-Site Wastewater Treatment & Dispersal Systems – Form B2
- Wastewater Treatment Plants Less Than 100,000 GPD – Form B3
- Wastewater Treatment Plants Greater Than or Equal to 100,000 GPD and all Pond Systems – Form B4
- Industrial Direct Discharge Facility – Form B5
- Industrial Indirect Discharge Facility – Form B6
- Underground Storage Tank Remediation – Form B7
- Holding Tanks – Form B8
- Land Application or Sludge Management Plan – Form B9

**17. Fee Calculations:**

Permit-to-Install (maximum total fee \$15,100)

a. Application fee:	\$ 100.00
b. Plan review fee:	\$ 100.00
c. Plan review fee (installation/construction cost x .0065):	\$ 15000.00
d. Total Fee (a + b + c):	<u>\$ 15,200.00</u>

Land Application\* Plan Approval

a. Application fee:	\$ 100.00
b. Plan review fee:	\$ 100.00
c. Total fee (a + b):	\$ 200.00

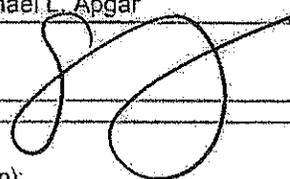
\* No separate fee is needed for land application of treated wastewater if the management plan is submitted as part of the PTI application for system installation.

**18. Signature of the Applicant: (see Ohio Administrative Code 3745-42-03)**

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision and that all the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are substantial penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.*

Typed name: Michael L. Apgar Title: President & COO

Signature: \_\_\_\_\_



Date: 11 19 07

**NOTE (Who Must Sign):**

The person signing as Applicant is not the applicant's engineer or architect or any other person submitting the Permit-to-Install Application on behalf of the owner. The Applicant is usually the owner of the facility, business, corporation, company, etc. It is not the engineer who prepared the plans.



**Permit-to-Install/Plan Approval Application**

Industrial Direct Discharger Facility

**FOR AGENCY USE ONLY**

Application Number: \_\_\_\_\_ Date Received: / /

Applicant: New Steel International, Inc.  
 Facility Owner: Michael L. Apgar  
 Application/Plans Prepared by: Lawhon & Associates, Inc.  
 Project Name: MMK - Americas

**1. Effluent quality of discharge from proposed treatment facility or project (concentration and loadings required)**

Parameter	30-day Average		Daily Maximum	
	Concentration (units)	Load* (kg/day)	Concentration (units)	Load* (kg/day)
pH (Standard Units)	6-9 S.U.	6-9 S.U.	6-9 S.U.	6-9 S.U.
Chromium, dissolved hexa	0.5 mg/L	1.4	0.75 mg/L	2
Total Suspended Solids	35 mg/L	94	50 mg/L	135
Oil and Grease	30 mg/L	81	45 mg/L	121
Cyanide	NIL	NIL	NIL	NIL
Nickel	0.5 mg/L	1.4	0.75 mg/L	2
Silver	NIL	NIL	NIL	NIL
Copper	2 mg/L	5.4	3 mg/L	8.1
Cadmium	NIL	NIL	NIL	NIL
Lead	0.10 mg/L	0.27	0.15 mg/L	0.4

\* Load calculations completed by using 2.2 MGD flow.

**2. List the hydraulic design capacity of the major components of the wastewater treatment system:**

Component	gpm	Component	gpm
See Drawings			

**3. List the sequence of receiving streams from the initial discharge point up to the first named stream:**

Ohio River

4. Is facility regulated by an NPDES permit?  Yes  No

If Yes, permit numbers: OH \_\_\_\_\_

**5. Contact person responsible for the technical aspects of this project:**

Name: Michael L. Apgar Phone No.: (513) 422 - 0100  
 Title: President & COO  
 Company: New Steel International, Inc.

**6. If the proposed wastewater treatment system is for a new facility or operation, has a site inspection been conducted by an Ohio EPA, Division of Surface Water representative?**

Yes  No If **No**, contact your Ohio EPA district office

**Submittals:**

This application must include the following unless otherwise directed by Ohio EPA:

- Four copies of the detail plans which include site plans, vicinity map, schematic diagrams, plan views, elevation views and cross-sectional views necessary to evaluate the processes.
- Two copies of complete technical specifications.
- Two copies of the Permit-to-Install/Plan Approval Application including Form A and the appropriate B form(s).
- Fee check payable to "Treasurer, State of Ohio."

**8. The foregoing data is a true statement of facts pertaining to this proposed industrial direct discharge installation.**

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Signed: \_\_\_\_\_ P.E.

Plans prepared by: \_\_\_\_\_



DIVISION OF SURFACE WATER

Antidegradation Addendum

In accordance with Ohio Administrative Code 3745-1-05 (Antidegradation), additional information may be required to complete your application for a permit to install or NPDES permit. For any application that may result in an increase in the level of pollutants being discharged (NPDES and/or PTI) or for which there might be activity taking place within a stream bed, the processing of the permit(s) may be required to go through procedures as outlined in the antidegradation rule. The rule outlines procedures for public notification and participation as well as procedures pertaining to the levels of review necessary. The levels of review necessary depend on the degradation being considered/requested. The rule also outlines exclusions from portions of the application and review requirements and waivers that the Director may grant as specified in Section 3745-1-05(D) of the rule. Please complete the following questions. The answers provided will allow the Ohio EPA to determine if additional information is needed. All projects that require both an NPDES and PTI should submit both applications simultaneously to avoid going through the antidegradation process separately for each permit.

- A. Applicant: New Steel International, Inc.
- Facility Owner: Michael L. Apgar
- Facility Location (city and county): Haverhill, Ohio
- Application or Plans Prepared By: Lawhon & Associates
- Project Name: MMK - Americas
- NPDES Permit Number (if applicable): \_\_\_\_\_

B. Antidegradation Applicability

Is the application for? (check as many as apply):

- Application with no direct surface water discharge (Projects that do not meet the applicability section of 3745-1-05(B)1, i.e., on-site disposal, extensions of sanitary sewers, spray irrigation, indirect discharger to POTW, etc.). (Complete Section E)
- Renewal NPDES application or PTI application with no requested increase in loading of currently permitted pollutants. (Complete Section E, Do not complete Sections C or D).
- PTI and NPDES application for a new wastewater treatment works that will discharge to a surface water. (Complete Sections C and E)
- An expansion/modification of an existing wastewater treatment works discharging to a surface water that will result in any of the following (PTI and NPDES): (Complete Sections C and E)
  - ▶ addition of any pollutant not currently in the discharge, or
  - ▶ an increase in mass or concentration of any pollutant currently in the discharge, or
  - ▶ an increase in any current pollutant limitation in terms of mass or concentration.

- \_\_\_\_\_ PTI that involves placement of fill or installation of any portion of a sewerage system (i.e., sanitary sewers, pump stations, WWTP, etc.) within 150 feet of a stream bed. Please provide information requested on the stream evaluation addendum (i.e., number of stream crossings, fill placement, etc.) and complete Section E.
- \_\_\_\_\_ Initial NPDES permit for an existing treatment works with a wastewater discharge prior to October 1, 1996. (Complete Sections D and E)
- \_\_\_\_\_ Renewal NPDES permit or modification to an effective NPDES permit that will result in any of the following: (Complete Sections C and E)
- ▶ a new permit limitation for a pollutant that previously had no limitation, or
  - ▶ an increase in any mass or concentration limitation of any pollutant that currently has a limitation.

### C. Antidegradation Information

1. Does the PTI and/or NPDES permit application meet an exclusion as outlined by OAC 3745-1-05(D)(1) of the Antidegradation rule?

\_\_\_\_\_ Yes (Complete Question C.2)

X  No (Complete Questions C.3 and C.4)

2. For projects that would be eligible for exclusions provide the following information:

a. Provide justification for the exclusion.

b. Identify the substances to be discharged, including the amount of regulated pollutants to be discharged in terms of mass and concentration.

c. A description of any construction work, fill or other structures to occur or be placed in or near a stream bed.

3. Are you requesting a waiver as outlined by OAC 3745-1-05(D)(2-7) of the Antidegradation rule?

X  No

\_\_\_\_\_ Yes

If you wish to pursue one of the waivers, please identify the waiver and submit the necessary information to support the request. Depending on the waiver requested, the information required under question C.4 may be required to complete the application.

4. For all projects that do not qualify for an exclusion a report must accompany this application evaluating the preferred design alternative, non-degradation alternatives, minimal degradation alternatives, and mitigative techniques/measures for the design and operation of the activity. The information outlined below should be addressed in this report. If a waiver is requested, this section is still required.

a. Describe the availability, cost effectiveness and technical feasibility of connecting to existing central or regional sewage collection and treatment facilities, including long range plans for

sewer service outlined in state or local water quality management planning documents and applicable facility planning documents.

- b. List and describe all government and/or privately sponsored conservation projects that may have been or will be specifically targeted to improve water quality or enhance recreational opportunities on the affected water resource.
- c. Provide a brief description below of all treatment/disposal alternatives evaluated for this application and their respective operational and maintenance needs. (If additional space is needed please attach additional sheets to the end of this addendum).

Preferred design alternative:

Non-degradation alternative(s):

Minimal degradation alternative(s):

Mitigative technique/measure(s):

At a minimum, the following information must be included in the report for each alternative evaluated.

- d. Outline of the treatment/disposal system evaluated, including the costs associated with the equipment, installation, and continued operation and maintenance.
- e. Identify the substances to be discharged, including the amount of regulated pollutants to be discharged in terms of mass and concentration.
- f. Describe the reliability of the treatment/disposal system, including but not limited to the possibility of recurring operation and maintenance difficulties that would lead to increased degradation.
- g. Describe any impacts to human health and the overall quality and value of the water resource.
- h. Describe and provide an estimate of the important social and economic benefits to be realized through this proposed project. Include the number and types of jobs created and tax revenues generated.
- i. Describe environmental benefits to be realized through this proposed project.
- j. Describe and provide an estimate of the social and economic benefits that may be lost as a result of this project. Include the impacts on commercial and recreational use of the water resource.

- k. Describe the environmental benefits lost as a result of this project. Include the impact on the aquatic life, wildlife, threatened or endangered species.
- l. A description of any construction work, fill or other structures to occur or be placed in or near a stream bed.
- m. Provide any other information that may be useful in evaluating this application.

D. Discharge Information

- 1. For treatment/disposal systems constructed pursuant to a previously issued Ohio EPA PTI, provide the following information:

PTI Number \_\_\_\_\_  
PTI Issuance Date \_\_\_\_\_  
Initial Date of Discharge \_\_\_\_\_

- 2. Has the appropriate NPDES permit application form been submitted including representative effluent data?

Yes (go to E)  
 No (see below)

If no, submit the information as applicable under a OR b as follows:

- a. For entities discharging process wastewater attach a completed 2C form.
- b. For entities discharging wastewater of domestic origin attach the results of at least one chemical analysis of the wastestream for all pollutants for which authorization to discharge is being requested and a measurement of the daily volume (gallons per day) of wastewaters being discharged.

- E. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete.

This section must be signed by the same responsible person who signed the accompanying permit application or certification as per 40 CFR 122.22.

Signature \_\_\_\_\_

Date \_\_\_\_\_

# Ohio EPA Anti-degradation Addendum

## New Steel International, Inc. MMK- Americas

### FEASIBILITY OF CONNECTING TO SEWAGE TREATMENT:

- A lift station(s) will be installed during facility construction to collect sewage and pump it to the nearby forced main in accordance with Scioto County requirements.
- Potable water for the facility will be from a tap made into the City of Portsmouth nearby water line in accordance with City requirements.

### DISCUSSION OF ALTERNATIVE DESIGNS

- The preferred design is that of a CSP-Mini Mill located at Haverhill which is the minimal degradation process.
- An integrated steel plant located at Haverhill would have much greater air impact and water discharge.
- The non degradation alternative is that of a finishing mill only. That is not an economically feasible process.

### Social and Economic Justification

A comparison of the social and economic justification for two of the alternatives are presented in the following table:

	Preferred Design	Non-degradation
Number of Residential lots	3	0
New Permanent Jobs	1,220	198
Estimated Payroll per year	\$62,300,00	\$11,170,000
Estimated Payroll Taxes per year	\$1,373,000	\$259,000

New Temporary Jobs	4,000	554
Estimated Temporary Payroll	\$499,200,000	\$66,400,000
Estimated Temporary Taxes	\$14,158,000	\$1,861,000
Other Taxes	\$131,165,000	\$42,326,000
Revenue Generated	\$2,983,300,000	\$849,200,000
Local Taxes Generated	\$8,301,000	\$1,488,165
State Taxes Generated	\$30,437,000	\$5,456,605
County Unemployment Rate	7.0%	7.0%
County Poverty Rate	19.3%	19.3%

## COMPARISON OF IMPACTS

A comparison of the environmental impacts from the NSI Steel Process at the Haverhill site versus the following alternatives is as followings:

- NSI Steel Process at another location; Air emissions and waste water discharge would be the same regardless of the location. The impact could vary. With regard to air, proximity to a national park is critical. The Haverhill site is not close to any such park. A significant impact could occur if the other site would be located on a small stream because the water discharge might impact adversely water quality. Proximity to an adequate source of water is paramount.
- Alternative Steel Process at Haverhill; The only other alternative is an integrated iron and steel plant which would require a greater water consumption and more air emissions. The graph following this write-up shows water consumption of a CSP-Mini Mill (the preferred design) to that of a average integrated steel plant. Although such processes also include a coke plant, for Haverhill, coke could presumably be obtained from the nearby Sun Coke Plant. This alternate process also occupies a larger area potentially impacting more wetlands and archeological sites.
- Alternative Steel Process at another location; An integrated iron and steel plant somewhere else could necessitate the installation of a coke plant in addition to a blast furnace because a coke supply would not necessarily be nearby.

## **POLLUTION PREVENTION CONCEPTS BEING CONSIDERED**

- All manufacturing will be conducted inside so that rainwater will not make contact with any of the processes, raw materials, byproducts and products.
- The RHF's and EAF's are capable of using certain iron rich waste products to make new iron and steel.
- Raw materials will be stored under roof which will prevent contact with rainwater and minimize wind blown emissions.
- All liquids will be stored within secure areas inside buildings or within secondary containment structures outside.
- Solid wastes will be stored within secure areas.
- The water systems will be designed with the intent of zero discharge.
- Stormwater runoff will be collected and become a source of make up water for the plant.

**SMS**  
 Water consumption (supply) of classical Integrated Steel Plants  
 and CSP-Mini Mills

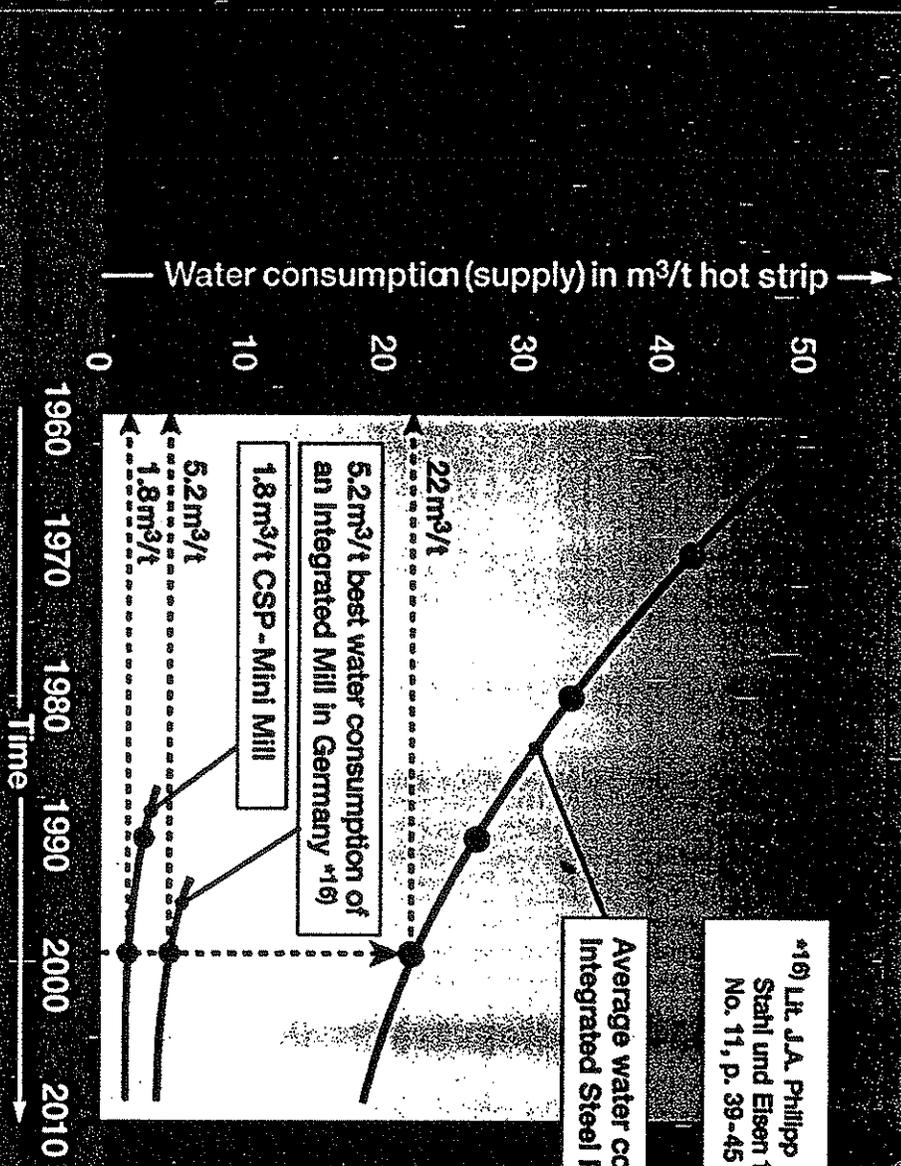


Fig. 24

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