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State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
FAX 608-267-3579
TTY Access via relay - 711



March 2, 2015

Bryant Esch
Waupaca Foundry, Inc.
1955 Brunner Dr.
Waupaca WI 54981

Subject: Welcome to Green Tier – Tier 1

Dear Mr. Esch:

Congratulations! We are glad to welcome you into Tier 1 of Green Tier. You join a group of companies who are not only committed to superior environmental performance but also to superior economic performance.

In recognizing your past accomplishments and future commitments we promise to work towards promoting and recognizing your facility for taking the lead in environmental performance while assuring community stability and economic growth. We are committed to publicizing Waupaca Foundry, Inc. (Plants 1, 2, 3, 4 and landfill) as a Green Tier participant on the DNR website. Undoubtedly, there will be other opportunities to bring attention to your accomplishments, and we hope to assist you in doing so as a Green Tier partner.

Sally Hronek has been assigned as your single point of contact. She can be reached at (920) 662-5493 or at Sally.Hronek@wisconsin.gov. Please contact her with any questions concerning communications, required approvals, or technical assistance you may need. For your convenience the attached Commitment Outline points out your benefits and important dates that affect your participation.

On behalf of the Wisconsin Department of Natural Resources, I am proud to extend this welcome to you. We are committed to working with you to build a customized relationship under the Green Tier program. I am excited to embark on our new relationship and my staff is ready to assist as your business grows.

Sincerely,

/s/ Michael Bruhn (signed for Cathy Stepp)

Cathy Stepp
Secretary

Cc: Tom Eggert
Sally Hronek

Attachments: Green Tier Commitment Outline
Green Tier Logo Files and Guidance CD
Green Tier Annual Report Guidance

**Green Tier Commitment Outline for
Waupaca Foundry**
Plants 1, 2, 3, 4, and Landfill

Approval Date – March 2, 2015

Commitment Outline Updated: (02/07/2020)

The updates since participation started are:

- Updated general content, format and links
- Updated Project Coordinator

I. Environmental Management Systems (EMS) & Audit Requirements

Your EMS must either be ISO-certified, or you must demonstrate that it is functionally equivalent. For information on how to demonstrate the functional equivalency of your EMS, please see: <https://dnr.wi.gov/files/PDF/pubs/co/C0503.pdf>

You have supplied us with a copy of your ISO 14001 certification, satisfying initial Green Tier EMS requirements.

To maintain good standing with Green Tier EMS requirements:

- A. On or before, **March 2, 2016** and every year after that, you must perform an environmental management system audit. The department recommends that your first audit be completed by a DNR-approved outside environmental auditor.
- B. On or before, **March 2, 2018** and every third year, this audit **must** be completed by a DNR-approved outside EMS auditor. The list of approved auditors can be found at: <https://dnr.wi.gov/topic/GreenTier/Auditors.html>

II. Provide an Annual Report

- A. **Annual Report Due Date** - We have mutually agreed that the deadline for your Green Tier annual report is **June 30, 2016** and annually thereafter. (Please feel free to discuss alternative reporting dates with your Project Coordinator should your needs change.)
- B. **Reporting on Environmental Performance Commitments:** Your first report should follow the annual report instructions provided below and should provide data on your progress toward meeting your environmental performance commitments laid out in your Green Tier application or your previous year's Green Tier annual report.
- C. **Annually**, you will need to report progress on the commitments that you have made. For more details about annual reports and metrics, see the annual report instructions provided on the website; <https://dnr.wi.gov/topic/GreenTier/ReportInstructions.html>
- D. Please provide annual Green Tier Reports to: GreenTier@Wisconsin.gov and your Single Point of Contact.

III. Work toward Superior Environmental Performance

Implement environmental improvements that aim to achieve Superior Environmental Performance as defined in Green Tier law. This means environmental performance that results in measurable or discernible improvement in the quality of the air, water, land, or natural resources, or in the protection of the environment, beyond that which is achieved under environmental requirements. More information on Superior Environmental Performance can be found here:

<https://dnr.wi.gov/topic/GreenTier/SuperiorEnvironmentalPerformance.html>

IV. Green Tier - Tier 1 – DNR Commitments

- A. **Single Point of Contact (SPOC):** Your single point of contact or SPOC is your liaison to the department, answering your questions or making connections within DNR or with other experts. Your SPOC is: Sally Hronek, Phone 920-662-5493, Sally.Hronek@Wisconsin.gov.
- B. **Green Tier Logo:** Green Tier participants may use the Green Tier logo on stationery, promotional and educational materials related to your facility. Logo files as well as the Green Tier Style Guide with additional guidelines and information are available online at: <https://wi-dnr.widencollective.com/portals/nkc57xuv/GreenTierBranding>. Your Project Coordinator can provide you with the current access code.
- C. **Recognition:** Along with the certificate of recognition, the department will host a [participant web page](#) for easy reference. Participants should provide information and pictures on their environmental efforts to populate the webpage. We will also promote your successes throughout your tenure in Green Tier using a variety of DNR communication channels.
- D. **Project Coordinators:** You should also feel free to contact your Project Coordinator for Green Tier specific information. Project Coordinators provide support to SPOCs and participants providing reminders on Green Tier requirement dates and by promoting a participant's successes. Your project coordinator is: Weston Wegener, Phone: 608-264-9753, Cell: 608-284-0908, Weston.Wegener@Wisconsin.gov.
- E. **Minimum Inspection Frequency:** Because you have implemented an EMS, you are entitled to inspections at the lowest frequency permitted by the programs under law. The department will work with you to determine how this will work for you.
- F. **Deferred Civil Action:** You are entitled to Deferred Civil Enforcement as described in statutes (299.83(6m)(d)). If you discover a violation of an existing environmental requirement, you are entitled to protection from any civil penalties that the department might otherwise impose if you:
 - 1. Notify the department
 - 2. Provide a corrective action plan and documentation of your Environmental Management System (EMS) adjustments that ensure the violation will not happen again, and
 - 3. Correct the violations within 90 days

Notice: Collection of this information is authorized under s. 299.83 Wis. Stat. Participation in Green Tier and completion of this form are voluntary. Personal information collected on this form, including such data as your name, address, phone number, etc., will be used in the implementation of Green Tier and will be made broadly available under the Green Tier program. Information will also be made accessible to requesters under Wisconsin's Public Records Law (ss. 19.32 – 19.39, Wis. Stats.). If you need to request confidential treatment of any information in order to protect a trade secret, please contact a DNR representative *prior* to submitting this form. Applications must be considered complete by the DNR in order to be processed. For complete application instructions, see "Green Tier Application Instructions," publication number CO-501.

This application is for... (check one): Tier 1 Tier 2 (attach Letter of Intent to this form)

I. Applicant Information

Contact Name Bryant Esch	Title Environmental Coordinator		
Street Address 1955 Brunner Dr.	City Waupaca	State WI	ZIP Code 54981
Telephone Number 715-258-6674	Fax Number	E-mail Address bryant.esch@waupacafoundry.com	

II. Facility Information

Facility Name Waupaca Foundry, Inc	County		
Street Address 1955 Brunner Drive	City Waupaca	State WI	ZIP Code 54981
Mailing Address P.O. Box 249	City Waupaca	State WI	ZIP Code 54981

Please provide all DNR Facility Identification numbers (FID #) that apply to the covered facility or activity.
See Attachment 1

III. Scope of Green Tier Participation (check one)

- This application covers all activities at the facility listed in Section II.
- This application covers all activities at more than one facility. For each facility to be covered under this application provide the information from Section II on a separate page labeled **Attachment 1**.
- This application does not cover all activities at every covered facility. Please describe the exact scope of activities and facilities to be covered in the program on a separate page labeled **Attachment 1**.

IV. Environmental Performance

Please provide the following information on a separate page labeled **Attachment 2**. Refer to the *Application Instructions* for definitions of environmental performance and superior environmental performance.

Tier 1 Applicants:

- Describe your past and current environmental performance with respect to each covered facility or activity included in this application. Within this attachment establish a baseline date against which future progress can be measured.
- Describe your future plans for enhancing the environment with respect to the same facilities/activities.

Tier 2 Applicants:

- Provide information demonstrating your record of superior environmental performance. Within this attachment establish a baseline date against which future progress can be measured.
- Describe the measures you propose to take to maintain and improve your superior environmental performance.

V. Environmental Management System (EMS)

- a. Have you implemented an EMS that is certified to the ISO 14001 standard? Yes No (select one)
- b. Have you implemented an EMS that is functionally equivalent to ISO 14001? Yes No (select one)

If you circled "No" for both questions, you are not eligible for Tier 2. Please proceed to Section VI only if you are applying for Tier 1.

If you circled "Yes" for either question, please provide a copy of the following documents labeled as **Attachment 3**:

- Proof of ISO 14001 certification OR functional equivalence (refer to *Application Instructions* for details)
- Environmental policy statement and scope statement
- Documented objectives and targets for the covered facilities/activities

VI. Public Involvement

Please provide in a separate document labeled **Attachment 4** a list of interested persons whom you know or expect will have a strong interest in your Green Tier application. Tier 2 applicants must provide additional information about interested person involvement in a Letter of Intent. Refer to *Application Instructions* for details.

VII. Enforcement Record

Please review the Enforcement Record requirements described in the *Application Instructions* very carefully, and then check the appropriate box:

- All enforcement record requirements relevant to this application are satisfied.
- All enforcement record requirements relevant to this application are **not** currently satisfied. A waiver of the enforcement record requirements is requested.

If a waiver is requested, please provide information describing any requirements not met and a justification for the waiver request on a separate page labeled **Attachment 5**. Note that waivers will be granted only in exceptional circumstances.

VIII. Tier 1 Applicant Statement of Commitments

I commit with my signature to the following statements and certify that all information provided in this application is true and correct under penalty of law:

- Implement, within one year of the date of this application, an EMS for each covered facility or activity that is certified to the ISO 14001 standard or is functionally equivalent to ISO 14001 as determined by DNR.
- Conduct annual EMS audits, with every 3rd EMS audit performed by a DNR-approved outside environmental auditor.
- Submit to DNR an annual report on each EMS audit that is in compliance with s. 299.83(6m)(a), Wis. Stats.
- Submit to DNR an annual report on progress towards meeting objectives related to improved environmental performance for aspects regulated under chs. 29 to 31, 160, or 280 to 299, Wis. Stats., unregulated environmental aspects, or voluntary actions to restore, enhance, or preserve natural resources.

Applicant Signature	Date Signed
Gary Gigante - President/CEO	11/14/14

IX. Tier 2 Applicant Statement of Commitments

I commit with my signature to the following statements and certify that all information provided in this application is true and correct under penalty of law:

- Conduct annual EMS audits performed by a DNR-approved outside environmental auditor.
- Conduct or have another person conduct an annual audit of compliance with environmental requirements that are applicable to the facilities and activities covered under Green Tier.
- Submit to DNR an annual report on each EMS audit that is in compliance with s. 299.83(6m)(a), Wis. Stats.
- Submit to DNR an annual report on each compliance audit that is in compliance with s. 299.83(6m)(a), Wis. Stats.

Applicant Signature	Date Signed
<i>Gary M. Gigante</i>	11/14/14

X. For Department Use Only

Date Received	Initials of Reviewer	Status	Date Returned to Applicant for Additional Information	Date Denied	Date Approved

Attachment 1

Waupaca Foundry, Plant 1
406 N. Division St.
Waupaca, WI 54981
FID # 469033730

Waupaca Foundry, Plant 23
1955 Brunner Dr.
Waupaca, WI 54981
FID # 469033840

Waupaca Foundry, Plant 4
805 Ogden St.
Marinette, WI 54143
FID # 438041450

Waupaca Foundry Landfill
N4496 Elm Valley Rd.
Waupaca, WI 54981
FID # 469084220

Attachment 2

Waupaca Foundry, Inc Environmental Sustainability

Setting Goals for Sustainable Growth

Metalcasters have long been recognized as some of the world's first recyclers. For centuries, foundries have been making new metal objects by re-melting old ones that have become unwanted scrap. While this is a good foundation for a claim that a well run foundry is an environmentally sustainable business, other opportunities exist to improve a foundry's environmental performance.

Waupaca Foundry, Inc. (WFI) has identified and implemented the following actions that serve as primary business goals to achieve sustainable growth between now and 2020:

Goals (2020):

- Reduce energy use by 25% over the next 10 years, using fiscal 2010 energy use as the baseline (mmbtu/ton of iron shipped).
- Promote alternative processes and maintain state of the art pollution control technologies. Maintain air pollution control systems considered as "best available" by the U.S. Environmental Protection Agency and associated state regulatory agencies for all processes regardless of the original installation date.
- Reduce spent foundry sand generation while promoting offsite reuse/recycling opportunities of remaining spent foundry materials to achieve zero landfill disposal. Reduce spent foundry sand generation by 30% in 10 years (baseline 2010)(tons)
- Continue water use optimization efforts to facilitate a company-wide reduction in water use consumption by 80% in 10 years (baseline 2010)(gallons)

Reducing Waupaca's Dependence on Energy

As a representative of an energy intensive industry, Waupaca Foundry has pursued energy use reduction practices and projects to reduce their carbon footprint and maintain global competitiveness. Since 2004, significant energy use reduction activities have included heat recovery for building /hot water heating, energy efficient lighting retrofits, and the widespread use of premium high efficiency motors.

Waupaca Foundry was recognized as an energy use reduction leader as a recipient of Wisconsin's 2009 Governor's Award for Environmental Excellence at its Plant One facility in Waupaca, Wisconsin. The recognition was honored for a novel heat recovery system that recovers waste heat from the cupola melting of iron scrap and uses it for heating the facility through the cold Wisconsin winters. This project along with other past successes has resulted in a reduction of 223,000 mmbtu per year in energy savings. This equates to the removal of approximately 3,200 passenger vehicles from U.S. highways.

Continuing in this spirit, WFI was among the first companies in the U.S. to volunteer for the U.S. Department of Energy's *Save Energy Now Leader* (later renamed *Better Buildings, Better Plants*) Program. This program seeks a commitment to voluntarily reduce industrial energy intensity by 25% in 10 years. The DOE/Waupaca Foundry agreement continues these efforts with the development of energy use and energy intensity baselines, and the ongoing implementation of an energy management plan to meet the challenging goal.

Maintaining Leadership in Pollution Control

Above and beyond any minimum regulatory requirements, WFI's philosophy is to use state of the art pollution control equipment to eliminate potential air pollution, and to seek new ways to continually reduce our air emissions. The air pollution control systems we install at our facilities are considered as "best available" by the U.S. Environmental Protection Agency and the State of Wisconsin for all processes regardless of the original installation date. Nearly a decade before the implementation of the Federal "maximum achievable" control requirements for the iron and steel industry, WFI was proactively retrofitting process air pollution control equipment in advance of the newly defined state of the art.

Of equal importance, filter leak detection instrumentation has been broadly utilized by WFI facilities as an elective technology to achieve superior air pollution control results. Such technology allows WFI to surpass regulatory requirements and create a new industry benchmark.

This leadership philosophy represents a continuation of the ongoing effort by Waupaca Foundry to maintain modern facilities that can succeed, both environmentally and economically, in the increasingly competitive worldwide marketplace.

WFI Expands on Past Foundry Sand Recycling Success

WFI has recognized a tremendous opportunity in the potential to reuse spent foundry sands (and slag) for beneficial purposes. Our casting processes require large volumes of sand, which are continually used, reconditioned and reused in the foundry. Sand that can no longer be used in the foundry process can be beneficially reused in lieu of disposal via landfilling. With systems in place to screen metal chunks and debris out of the sand, foundry sand represents a clean, non-toxic product that can be used in a variety of applications and industries. Examples of such uses include geotechnical fill, road construction, agricultural use, cement manufacturing, concrete products and asphalt.

WFI has been recycling foundry sands for over two decades, and has worked in partnerships with state and local agencies (such as the Wisconsin Department of Transportation) to complete projects that would have required substantial quantities of native sand and gravel materials. Using foundry sands and slag for these projects is not just a better use for WFI's byproducts, but has the added benefit of preventing the need to mine native materials elsewhere for the same project. The benefits of foundry sands as a non-toxic resource has become increasingly promoted by state and federal government,

along with new research that demonstrates foundry sand's benefits as soil amendments, manufactured topsoils, and highway subbase fill (among many other uses).

WFI's past efforts have resulted in 70% of the byproducts generated from the foundry process now being incorporated into a multitude of local beneficial reuse projects. This is a significant achievement, and marks WFI's ongoing efforts to evolve our environmental management program and meet our environmental responsibilities.

Using these materials for a higher use is the right thing to do, and WFI will continue to work to reduce our dependency on landfilling as a final destination for otherwise beneficial spent foundry materials.

Eliminating the Need to Generate and Discharge Non-Contact Cooling Water

Historically, operating a successful foundry required water....a lot of water. Water had been consumed in several ways, including contaminated process water requiring treatment as a result of air pollution control activities, and non-contact cooling water used to cool running machinery. As a result of plant improvements implemented by WFI over the last decade, contaminated process water requiring wastewater treatment and discharge has been completely eliminated from WFI facilities.

Following that accomplishment, WFI initiated the investment and installation of closed loop cooling water systems to eliminate the remaining significant contributor to plant water usage in the form of "once through" non-contact cooling water. Completed systems have demonstrated overwhelming success, with plant cooling water demands being cut by 80% or more, and non-contact cooling water discharges reduced to near zero.

Building on this success, additional closed loop systems are currently being designed with the intention of forever removing Waupaca Foundry from the single use water discharge paradigm.

Reporting on our Progress

Waupaca Foundry is developing a format to report periodically on our continued success in meeting these goals.

Media Information:

Sara Timm (see address below)

Corporate Office:

Waupaca Foundry, Inc.
1955 Brunner Drive
Waupaca, WI 54981
(715) 258-6611

Attachment 3

Current Waupaca Foundry, Inc. Environmental Management System (EMS) certification documentation for all facilities can be accessed at:

<http://www.waupacafoundry.com/EN/Our Commitment/Sustainability/Pages/default.aspx>

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Locations

Download "How Can We Become a Practical Green Foundry Industry", a white paper that offers a practical look at how Waupaca Foundry has reduced its energy consumption and carbon footprint.

Presented during CastExpo'10 in Orlando, FL and published in AFS Transactions and the International Journal of Metalcasting

Sustainability

Foundries are the ultimate recyclers. For generations, we have created new products out of recycled steel scrap and iron and we re-use many of the raw materials used in creating durable castings. However, foundries are also energy-intensive businesses and it is imperative we keep finding smarter ways to use our natural resources.

At Waupaca Foundry, we have a 10-year vision for sustainability with achievable goals for reducing our environmental impact:

- Reduce energy use intensity by 25%
- Promote alternative processes and maintain state of the art pollution control technologies
- Reduce spent foundry sand generation by 30% while promoting offsite reuse/recycling opportunities of remaining spent foundry materials to achieve zero landfill disposal
- Reduce water use consumption by 80%.

Waupaca Foundry is setting the pace in the industry, committing to continuous environmental sustainability. Since 2004, we have engaged in significant energy conservation programs including using foundry process waste heat for building/hot water heating, installing energy efficient lighting, and the widespread use of premium high efficiency motors.

Waupaca Foundry re-melts and re-uses more than 800,000 tons of metal annually.

ENERGY Newsletter: Waupaca

Waupaca Foundry maintains an Environment Management System and is registered to ISO 140001 at all foundry locations.

UL Management Systems Solutions

- View certificate for Plant 1
- View certificate for Plants 2 & 3
- View certificate for Plant 4
- View certificate for Plant 5
- View certificate for Plant 6