

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 082010 - 00 Project Number: 2010-05-023

Parent Company: PlayPower, Inc.

Parent Company Address: 13620 E. Reese Blvd., Huntersville, NC 28078

Installation Name: PlayPower Operations

Installation Number: 009-0039

Installation Address: 878 E Hwy 60, Monett, MO 65708

Location Information: Barry County, S32, T26N, R27W

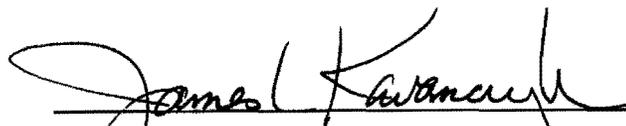
Application for Authority to Construct was made for:
A Pollution Control Products brand, model PRC 686L paint stripping furnace. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

AUG - 2 2010

EFFECTIVE DATE



DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

PlayPower Operations
Barry County, S32, T26N, R27W

1. Process Requirements
 - A. PlayPower Operations shall operate the Pollution Control Products brand, model PRC 686L paint stripping furnace in accordance with the manufacturer's specifications.
 - B. Loading the furnace between cleaning cycles is prohibited.
 - C. The furnace shall be equipped with a continuous recorder that monitors, displays and records the temperature in the afterburner with an accuracy of five percent ($\pm 5\%$).
 - D. PlayPower Operations shall maintain the temperature in the afterburner at or above 1,500 degrees Fahrenheit.
 - E. Material containing chlorine including vinyl chloride and polyvinyl chloride shall not be combusted in the furnace.
2. Fuel Requirement
PlayPower Operations shall fuel the furnace exclusively with natural gas.
3. Superseding Condition
Special Condition 4 of this permit supersedes Special Condition 2 found in the previously issued construction permit 032004-002 issued by the Air Pollution Control Program.
4. Emission Limitation
 - A. PlayPower Operations shall emit less than 25.0 tons combined of Hazardous Air Pollutants (HAPs) in any consecutive 12-month period from the entire installation. For purposes of this condition, the entire installation refers to all HAP emitting operations at the installation as of the date of this permit.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- B. PlayPower Operations shall emit less than 10.0 tons of any individual HAP in any consecutive 12-month period from the entire installation. For purposes of this condition, the entire installation refers to all HAP emitting operations at the installation as of the date of this permit.
 - C. Attachment A and Attachment B or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 4.A and 4.B, respectively.
5. Record Keeping and Reporting Requirements
- A. PlayPower Operations shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used.
 - B. PlayPower Operations shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2010-05-023
Installation ID Number: 009-0039
Permit Number:

PlayPower Operations
878 E Hwy 60
Monett, MO 65708

Complete: May 12, 2010

Parent Company:
PlayPower, Inc.
13620 E Reese Blvd
Huntersville, NC 28078

Barry County, S32, T26N, R27W

REVIEW SUMMARY

- PlayPower Operations has applied for authority to install a Pollution Control Products brand, model PRC 686L paint stripping furnace.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are from natural gas combustion and surface coating combustion.
- New Source Performance Standards (NSPS) Subpart EE *Standards of Performance for Surface Coating of Metal Furniture* applies to the installation. NSPS Subpart CCCC *Standards of Performance for Commercial and Industrial Solid Waste Incineration Units (CISWI) for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced After June 1, 2001* does not apply to the furnace as it is not defined as a CISWI under exemption 60.2020(k).
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation. None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- The furnace is equipped with two afterburners serving as control devices for VOC and HAP emissions created in the primary chamber.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of all pollutants are below de minimis and insignificant emission exemption levels. This furnace is classified as an incinerator according to 10 CSR 10-6.020(2)(I)1. and 10 CSR 10-6.020(2)(R)3. An incinerator is required to obtain a construction permit according to 10 CSR 10-6.060(1)(B).

- This installation is located in Barry County, an attainment area for criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels. Also, no model is currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions.
- Emissions testing are not required for the equipment.
- An application to amend your basic operating permit (2009-09-029) is required within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

PlayPower Operations, formerly Miracle Recreation Equipment, is an existing playground equipment manufacturer in Monett, Missouri. PlayPower consists of two physically separate installations, Monett East Plant (ID 009-0039) and Monett West Plant (ID 009-0048), which are one installation for permitting purposes. PlayPower is a minor source for VOC and synthetic de minimis source for HAPs under construction permits and has a basic operating permit.

No permits, but three no permit required letters and one correction have been issued to PlayPower 009-0048. The following permits have been issued to PlayPower 009-0039 from the Air Pollution Control Program.

Table 1: ID 009-0039 Permit History

Permit Number	Description
0792-021	Fiberglass and paint
0493-010	Roto Mold machine
¹ 1293-020	Move fiberglass and plastic manufacturing equipment to installation 009-0048
OP2000-094	Part 70 operating permit
OP2000-094A	Part 70 operating permit amendment
032004-002	Powder coat paint line
2005-01-059	Part 70 operating permit termination
2009-09-029	Basic operating permit

¹ Permit 1293-020 did not specify the new location as installation 009-0048, but the locations are the same.

PROJECT DESCRIPTION

PlayPower is installing a Pollution Control Products brand, model PRC 686L paint stripping furnace at the Monett East Plant (ID 009-0039). The furnace is needed to remove new types of cured powder coating from hooks, which cannot be removed by the existing potassium hydroxide system. The furnace has four burners, two in the primary chamber and two afterburners. The total heat rating is 1.8 million British thermal units per hour of natural gas input.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 1.4 “Natural Gas Combustion,” July 1998.

Emissions were calculated from the combustion of natural gas only. While the combustion of cured powder coating will produce some particulate matter and VOC emissions, these emissions are insignificant compared to emissions from natural gas combustion, and will be controlled at an expected efficiency above 99.0% by the afterburner. The new powder coatings do not contain hazardous air pollutants, per the respective material safety data sheets.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year.) The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	¹ Existing Potential Emissions	² Existing Actual Emissions (2009 EIQ)	Potential Emissions of the Application	New Installation Potential Emissions	³ New Installation Conditioned Potential
PM ₁₀	15.0	11.65	0.17	5.87E-02	11.71	N/A
SOx	40.0	0.19	0.01	4.64E-03	0.19	N/A
NOx	40.0	34.37	2.10	7.73E-01	35.14	N/A
VOC	40.0	<79.9	4.11	4.25E-02	79.94	N/A
CO	100.0	24.27	1.37	6.49E-01	24.92	N/A
HAPs	10.0/25.0	<10.0/25.0	N/D	1.46E-02	N/D	<10.0/25.0
Styrene	10.0	<10.0	N/D	N/A	N/D	<10.0

N/A = Not Applicable; N/D = Not Determined

¹ Existing Potential Emissions from both installations (009-0039 and 009-0048), from project 2009-05-036.

² Existing Actual Emissions from installation 009-0039 only.

³ New Installation Conditioned Potential for combined installations.

As the installation is a synthetic de minimis source for HAPs, and this project adds HAPs emissions, the installation wide limit in construction permit 032004-002 Special Condition 2 is being superseded and reinstated. Since the potential combined HAP emissions of the project are only approximately 0.01 tons per year, to ease record keeping these emissions are directly accounted for in Attachment A.

NSPS Subpart CCCC *Standards of Performance for Commercial and Industrial Solid Waste Incineration (CISWI) Units for Which Construction is Commenced After November 30, 1999 or for Which Modification or Reconstruction is Commenced After June 1, 2001* does not apply to the furnace as it is not currently defined as a CISWI under exemption 60.2020(k).

On April 29, 2010, the EPA proposed revisions to the December 2000 NSPS and emission guidelines for new and existing CISWI units. A CISWI unit is any device used to burn solid waste at a commercial or industrial facility. A burn-off oven that combusts residual material off racks, parts, drums, or hooks so those items can be re-used in various production processes is an example of a CISWI unit. Incinerators were the only subcategory covered in the 2000 rule. The proposed rule would cover burn-off ovens, too.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of all pollutants are below de minimis and insignificant emission exemption levels. This furnace is classified as an incinerator according to 10 CSR 10-6.020(2)(I)1. and 10 CSR 10-6.020(2)(R)3. An incinerator is required to obtain a construction permit according to 10 CSR 10-6.060(1)(B).

APPLICABLE REQUIREMENTS

PlayPower Operations shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110. The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170

- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

SPECIFIC REQUIREMENTS

- *New Source Performance Regulations*, 10 CSR 10-6.070 – *New Source Performance Standards (NSPS) for Surface Coating of Metal Furniture*, 40 CFR Part 60, Subpart EE

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

David Little
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated May 6, 2010, received May 12, 2010, designating PlayPower, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southwest Regional Office Site Survey, dated May 20, 2010.

