JAMES METZEN MIGHTY DUCKS GRANT APPLICATION

Type of Application: (check one)
[ ] Indirect R-22 Elimination [ ] Direct R-22 Elimination
[⋈] Indoor Air Quality Improvement

Local Government Unit (LGU) City of Northfield
LGU Application Contact (Name, Title, Address, Email & Telephone) Ben Martig City Administrator 801 Washington St., Northfield, MN 55057 ben.martig@ci.northfield.mn.us, 507-645-3009
Project Name and Physical Address Improving Indoor Air Quality with an Electric Ice Resurfacer Northfield Ice Arena,1280 Bollenbacher Dr., Northfield, MN 55057
Primary Contact (Name, Email & Telephone) David Bennett david.bennett@ci.northfield.mn.us 507-645-3006
Minnesota Tax ID Number
Federal Employee ID Number
Minnesota House of Representatives District Number of Facility David Bly MN House - 20B

Include Project Documentation found at mnsports.org/mighty_ducks.stm.

EXECUTION:

IN WITNESS THEREOF, the applicant has caused this application to be executed on the _____ day of _____, 2016.

_____ _____
By: (Authorized Signer) (Title)

Mail three originals of this form to:
Minnesota Amateur Sports Commission
1700 105th Avenue NE, Blaine MN 55449-4500

IMPROVING INDOOR AIR QUALITY with an Electric Ice Resurfacer

1. Resolution of Local Government Unit

The Northfield City Council will look to adopt a resolution at its October 4, 2016 meeting authorizing the filing of the Minnesota Amateur Sports Commission (MASC) grant application for funding of a new electric ice resurfacer. A copy of the resolution will be mailed and sent electronically after the resolution has been adopted.

2. Local Financial Commitment

The city of Northfield (City) is committed to providing $83,567.00 towards the project. A $50,000.00 Mighty Ducks Grant is being requested of the MASC to fund the remaining amount needed to purchase the electric ice resurfacer. The City's $83,567.00 more than matching contribution to the project will be secured from the following source:

A. Ice Arena Capital Improvement Fund

In 2016 year the City Council approved the Capital Equipment Plan that identified replacement of the currant ice resurfacer with funds from the Vehicle Equipment Replacement Fund.

3. Description of Project

The City will be purchasing a new electric ice resurfacer should the City's grant application be approved for funding. The new electrical ice resurfacer would be ordered in early 2017.

The intent of the project is to purchase a new electric ice resurfacer to replace the City's current liquid propane (LP) fueled ice resurfacer. The existing ice resurfacer was purchased and put into operation in the fall of 2007. The end goal is to improve the air quality inside the Arena. The use of the current LP fueled ice resurfacer produces a daily carbon monoxide reading on average of between 4-6ppm in the interior of the Arena.

Currently the City owns and operates a gas powered ice edger. The plan is to purchase an electric ice resurfacer and purchase an electric ice edger with the savings from the electric resurfacer resulting in the City owning and operating all electrical ice maintenance equipment that will produce zero emissions. This means no carbon monoxide, carbon dioxide or nitrogen dioxide emissions inside the Arena, which means a clean air environment for all patrons, players and staff.

4. Project Budget

The project budget is outlined as follows:

Expense Item	Amount	Funding Source	Amount
Electric Ice Resurfacer	$132,132.00	City Contribution	$82,132.00
Electrical Work	$1,435.00	City Contribution	$1,435.00
		Mighty Ducks Grant	$50,000.00
	Total: $133,567.00		$133,567.00

5. Operating Budget

The annual operating cost of the project for the new ice resurfacer is estimated to be approximately $250.00, which is a direct result of electrical use to charge the battery. In 2015, the annual operating cost of the current LP ice resurfacer was $4,122.34. The primary factor in the reduction of the ice resurfacer operating cost is due to the reduced cost of fuel when operating an electrical ice resurfacer versus an LP ice resurfacer. With the addition of an electric ice resurfacer and budgeting for an electric ice edger the City could eliminate air testing costs, which, in 2016 the cost was $569.90 for the gas cylinders which are good for about 2 seasons.

Because the existing ice resurfacer is near the end of its useful life (10-12 years is normal life expectancy), the operating and maintenance costs have increased since purchasing and putting it into operation in 2007. During the 2015 – 2016 regular season, the city

spent $2,489.50 on the maintenance of its existing ice resurfacer. The maintenance work has included items such as:

- Replaced water pump thermostat
- Replaced radiator
- Replaced radiator hose
- Replaced coolant level probe
- Replaced board brush
- Replaced 4 studded 16 inch tires
- Replaced muffler
- Routine oil changes and filters

Purchasing an electric ice resurfacer would substantially reduce the annual maintenance costs. Given the estimated annual operating and maintenance cost savings of $7,181.74 the city would be able to budget for an electric ice edger and have the battery in the electrical ice resurfacer on a replacement schedule of once every seven years, or dependent on maintenance and projected life of the existing equipment.