

City of Coquitlam

Request for Proposals  
RFP No. 19-01-04

# Desiccant De-Humidifier Replacement

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**[PROPOSAL SUBMISSION FORM](#)**

**SUMMARY OF KEY INFORMATION**

<b>RFP Reference</b>	<b>RFP No. 19-01-04</b> <b>Desiccant De-Humidifier Replacement</b>
<b>Overview of the Opportunity</b>	The purpose of this RFP is to invite proposals from qualified firms for the provision of <b>Desiccant De-Humidifier Replacement</b> at Poirier Sport and Leisure Centre (PSLC), 633 Poirier Street, Coquitlam, BC.
<b>Closing Date and Time</b>	<b>2:00 pm local time</b> <b>Thursday, February 14, 2019</b>
<b>Instructions for Proposal Submission</b>	Proposals are to be consolidated into one PDF file and uploaded electronically through Qfile, the City’s file transfer service accessed at <a href="http://qfile.coquitlam.ca/bid">qfile.coquitlam.ca/bid</a>  <ol style="list-style-type: none"> <li>1. <b>In the “Subject Field” enter:</b> RFP Number and Name</li> <li>2. <b>Add files in .pdf format and Send</b> (Ensure your web browser remains open until you receive 2 emails from Qfile to confirm receipt.)</li> </ol> Phone 604-927-3060 should assistance be required.  The City reserves the right to accept proposals received after the closing date and time.
<b>Obtaining RFP Documents</b>	RFP Documents are available for download from the City of Coquitlam’s website: <a href="http://www.coquitlam.ca/BidOpportunities">www.coquitlam.ca/BidOpportunities</a>  Printing of RFP documents is the sole responsibility of the Proponents.
<b>Instructions to Proponents</b>	The guidelines for participation that will apply to this RFP are posted on the City’s website: <a href="#">Instructions to Proponents</a>
<b>Questions</b>	Questions are to be submitted in writing quoting the RFP number and name up to 3 business days before the closing date sent to email: <a href="mailto:bid@coquitlam.ca">bid@coquitlam.ca</a>
<b>Addenda</b>	Proponents are required to check the City’s website for any updated information and addenda issued, before the Closing Date at the following website: <a href="http://www.coquitlam.ca/BidOpportunities">www.coquitlam.ca/BidOpportunities</a>
<b>Withdrawal of Submission</b>	Proposals may be withdrawn by written notice only, made by an authorized representative of the Proponent sent to email: <a href="mailto:bid@coquitlam.ca">bid@coquitlam.ca</a> prior to the Closing Date and Time.
<b>Terms and Conditions of Contract</b>	<a href="#">City of Coquitlam Terms and Conditions of Purchase</a> are posted on the City’s website and will apply to the contract awarded as a result of this RFP.

## DEFINITIONS

**“City” “Owner”** means City of Coquitlam;

**“Agreement” “Contract”** means the contract for services or City Purchase Order that will be issued to formalize with the successful Proponent through negotiation process with the City based on the proposal submitted and will incorporate by reference the Request for Proposals, Specifications, Drawings, any additional subsequent information, any addenda issued, the Proponent’s response and acceptance by the City;

**“Consultant”** means the independent professional roof application firm contracted by the City to provide specifications and contract compliance for the project;

**“Contractor”** means a Proponent who Proposal the City has accepted and to whom the Contract has been awarded;

**“Drawings”** means the graphical and pictorial portions of the RFP issued as an appendix to this RFP;

**“Price”** means the amount that will be paid by the City to the Contractor for delivery and acceptance of goods and Services;

**“Project Manager”** means the City staff member appointed to coordinate the work;

**“Proponent”** means responder to this Request for Proposals;

**“Proposal”** means the submission by the Proponent;

**“Request for Proposals” “RFP”** shall mean and include the complete set of documents, specifications and addenda incorporated herein, and included in this Request for Proposals;

**“Services” ”Work” “Works”** means and includes the provision by the successful Proponent of all services, duties, and expectations as further described in this RFP. This will also mean the whole of the work, tools, materials, labour, equipment, travel, and all that is required to be done, furnished and performed by the Contractor;

**“Shall” “Must” “Will” “Mandatory”** means a requirement that must be met;

**“Supply” “Provide”** shall mean supply and pay for and provide and pay for.

## 1. INSTRUCTIONS TO PROPONENTS

### 1.1 Purpose

The City requests proposals from qualified, experienced Contractors to provide labour, equipment, materials, fuel, transportation, overhead and all that is necessary for the **Desiccant De-Humidifier Replacement** (the ‘Services’) located at Poirier Sport and Leisure Center (PSLC), 633 Poirier Street, Coquitlam, BC as outlined in Section 3 – Scope of Services.

### 1.2 Site Meeting

There will be no site meeting scheduled for this RFP. Proponents are to contact Brie-Anne Mason at 604-218-1691 or email [bmason@coquitlam.ca](mailto:bmason@coquitlam.ca) to arrange access to view site.

### 1.3 Instructions to Proponents

Proponents are advised that the rules for participation that will apply to this RFP are located: [Instructions to Proponents](#).

By submission of a proposal in response to this RFP, the Proponent agrees and accepts the rules by which the bid process will be conducted.

- 1.3.1. Proponents are responsible to inspect the existing site and shall fully understand the difficulties and restrictions for execution of the Work under this Contract. Interpretations by the Proponent of the meaning of any section of the Contract drawings and specifications herein prior to submitting a price for the Work shall not remove the responsibility of completing the Work as per the directions of the City, including all costs associated with that Work, should the Proponent’s interpretation be incorrect.  
  
Prior to submitting a price for the Work, the Proponent must seek clarification from the City for any items within the drawings and specifications that may appear to be unclear or conflicting.
- 1.3.2. Prior to bidding, Proponents should visit, inspect, and familiarize themselves with the site and of everything and of every condition potentially affecting the works to be executed, so that the execution of the Contract by the successful Proponent is founded and based upon the Proponent's own examination, information, and judgment. Failure to visit the site prior to the Proposal Closing Date will in no way relieve the successful Proponent from the necessity of furnishing any material or performing any work that may be required to complete the work in accordance with the conditions and specifications without additional cost to the City.
- 1.3.3. It shall be the responsibility of the Proponent, by personal inspection of the site of the works, examination of the contract documents, calculations, tests, and by requesting any required clarifications from the City, to become satisfied with respect to the quantities, quality, and practicability of the Work. The Proponent must be aware that any information from the City was and is approximate and speculative only and cannot in any manner be warranted or guaranteed. If the Proponent fails to make a proper investigation and examination of the site and the Work they shall signify by entering into the Contract that they are willing to assume all risk of the Work proving more onerous than was contemplated and/or assumed when the City Purchase Order (PO) is issued.

- 1.3.4. A complete set of RFP and Contract documents will include:
  - a) Request for Proposals Documents
  - b) Proposal Submission Form
  - c) Appendices
  - d) PO
  - e) Technical Specifications and Drawings – Appendix A and Appendix B
  - f) Addenda as issued
- 1.3.5. Figure dimensions of a drawing shall take precedence over measurements scaled from the drawing and large scale drawings take precedence over those of a smaller scale. Supplementary drawings and specifications supersede their antecedents. Addenda drawings take precedent over all drawings. Addenda specifications take precedent over all specifications. In case of conflict between figured dimensions on a drawing and the dimensions of a specified product, the dimensions of the specified product will govern. The drawings and specifications complement each other and anything called for by one will be as binding as if called by both.
- 1.3.6. All information requested for the Proposal are to be completed by the Proponent on the supplied forms only and shall be based upon the whole of the specifications and Contract documents, without reservation. A Proposal that does not include all of the above sections, completed as specified herein, will be considered an improper Proposal and may be rejected.
- 1.3.7. All information requested for the Proposal are to be completed by the Proponent on the supplied forms only and shall be based upon the whole of the specifications and Contract documents, without reservation. A Proposal that does not include all of the above sections, completed as specified herein, will be considered an improper Proposal and may be rejected.
- 1.3.8. Responses or notations to a Request for Proposal submission which provides a condition of sale or any other attachment which alters the conditions or specifications, or makes it subordinate, may be cause for rejection, at the option of the City.
- 1.3.9. The selected Proposal shall include supply all materials and construction necessary for the successful starting and completion of the project in accordance with the drawings and specifications herein. It shall be the responsibility of the Proponent to include in the submitted Proposal sufficient amounts to cover the cost of the work and materials required to complete the Work but not specifically noted in the drawings and/or specifications. It is assumed that all taxes, duties and levies have been included in the Proposal amount.
- 1.3.10. Complete sub-contracting of works will not be approved; however, segments of work involving special skills may be sub-contracted.
- 1.3.11. The Proponent is to indicate the names of the Proponent's senior staff for the project, specifically identifying the project superintendent, and the names of the major sub-contractors and the work they will be performing.

1.4 Nominated Sub-Contractors for Trades Work

Only prequalified sub-contractors shall perform the roofing, controls, and HVAC related work on this project. The successful Proponent is to coordinate the construction work directly with these companies.

Proponents are to contact the following companies to obtain pricing for the work. The price for the work is to be included in the total Proposal Price.

The City’s pre-qualified Contractors are:

Category	Pre-qualified Contractor(s)	Contact Phone Number	Contact Name and Email Address
Roofing	CentiMark Ltd. 205-669 Ridley Place, Delta BC V3M 6Y9	604-521-8911	Joey Scobey <a href="mailto:joey.scobey@centimark.com">joey.scobey@centimark.com</a> Jiwon Choi <a href="mailto:jiwon.choi@centimark.com">jiwon.choi@centimark.com</a> Arlyne Leiva <a href="mailto:arlyne.leiva@centimark.com">arlyne.leiva@centimark.com</a>
Controls	Johnson Controls Inc. 1485 Lindsey Place Delta, BC V3M 6V1	604-707-5200	Jordain Charette <a href="mailto:jordain.peter.charette@jci.com">jordain.peter.charette@jci.com</a> Marie Barritt <a href="mailto:marie.j.barritt@jci.com">marie.j.barritt@jci.com</a> Sandy Chen <a href="mailto:sandy.chen@jci.com">sandy.chen@jci.com</a>

The City has contracted with the above listed companies through an RFP process for the work stated. Refer to: <https://www.coquitlam.ca/city-hall/bid-opportunities/closed-bids.aspx>

1.5 Bonding

A **CONSENT OF SURETY SHOULD BE SUBMITTED WITH THIS PROPOSAL** confirming agreement to Bond and to verify the Proponent will provide, at time of award:

- a) **A Performance Bond in the amount of 50% of the proposal price;**
- b) **A Labour and Materials Payment Bond in the amount of 50% of the proposal price.**

1.6 Evaluation Criteria

The criteria for evaluation of the Proposals may include, but is not limited to:

**Corporate Experience, Capacity and Resources – 40 points**

- Experience, and demonstrated successful performance providing on projects of similar size, scope and complexity
- References
- Qualifications and experience of the Proponent and Key Personnel
- Sub-contractors

**Technical – 35 points**

- Methodology, disposal and quality assurance
- Ability to comply with the stated specifications and requirements
- Equipment and resources
- Schedule and Completion Date

**Financial and Value Added – 25 points**

- Total Price, Labour and Equipment Rates
- Value Added Benefits
- Sustainable Benefits and Social Responsibility

These criteria will be used to determine best overall value to the City. Proposals will be compared to select one or more that are most advantageous.

And, upon selection of one or more lead Proponent(s):

- References may be contacted
- Interviews may be conducted

The criteria listed above will be used to determine best overall value to the City. Proposals will be compared to select one or more that are most advantageous.

The City reserves the right to check references on other projects even if they are not specifically listed. Information obtained from references will be confidential and will not be disclosed to any Proponents.

The City may, at its discretion, request clarification or additional information from a Proponent with respect to any Proposal and the City may make such requests to only selected Proponents. The City may consider such clarifications or additional information in evaluating a proposal.

Proponents agree the City may disclose names of Proponents and total award amount, however, unevaluated results, unit prices, rates or scores will not be provided to any Proponents.

Incomplete Proposals or Proposals submitted on forms other than the Proposal Form may be rejected.

The City reserves the right to reject without further consideration any Proposal which in its opinion does not meet the criteria it considers essential for the work outlined in this RFP.

#### 1.7 Examination of Proposal Documents

The Proponent must carefully examine the Proposal Documents. The Proponent may not claim, after the submission of a Proposal, that there was any misunderstanding with respect to the requirements and conditions imposed by the City of Coquitlam.

There will be no opportunity to make any additional claim for compensation or invoice for additional charges that were not considered and included in the Proposal price submitted, unless the City, at its sole discretion, deems that it would be unreasonable to do so, or there are additional work requirements due to unforeseen circumstances.

All information in this RFP Document and any resulting Addenda will be incorporated into any Contract between the City and the successful Proponent, and therefore must be considered by the Proponent in preparing their Proposal.

#### 1.8 Prices

Prices shall be all-inclusive and stated in (Canadian Funds). Prices shall remain FIRM for the completion of the Services.

Prices shall include the provision of all tools, materials, equipment, labour, transportation, fuel, supervision, management, overhead, materials, traffic control, services, all necessary packing and crating (where applicable), Canadian Customs import and export duties, freight, handling, transportation, insurance, all other associated or related charges, foreign, federal, provincial and municipal taxes, bonding costs, all licences, permits, inspections and all other requirements necessary for the commencement, performance and completion of Services as described.

Taxes are to be shown separately at time of invoicing.

The lowest price of any Proposal will not necessarily be accepted but will be analyzed to determine best overall value.



### 1.9 Eligibility

For eligibility, and as a condition of award, the successful Proponent would be required to meet or provide the equivalent:

- a) Commercial General Liability (CGL) insurance \$5M coverage provided on the City's [Certificate of Insurance - Contractor Form](#)
- b) Be registered and provide WorkSafeBC clearance
- c) [Prime Contractor Designation Form](#) and be responsible for all the work at the site in accordance with WCB regulations
- d) Accept the City's standard Terms and Conditions posted on the City's website: [Terms and Conditions of Purchase](#)
- e) A City of Coquitlam or Tri Cities Intermunicipal [Business License](#)

These items are not required as part of this Proposal Submission but will be required prior to entering into an agreement with the City for Services.

### 1.10 Acceptance of Proposals

Proposal responses or notations which provides for a condition of sale or any other attachment which alters the conditions or specifications, or makes it subordinate, may be cause for rejection, at the option of the City.

The City reserves the right to waive formalities in, accept or reject any or all Proposals, cancel this RFP, or accept the Proposal deemed most favourable in the interest of the City. The lowest Proposal may not necessarily be accepted, rather will be analyzed to determine best overall value to the City.

The City reserves the right to cancel this RFP at any time without recourse by the Proponent. The City has the right to not award this work for any reason including choosing to complete the work with the City's own forces.

No alterations, amendments or additional information will be accepted after the closing date and time unless invited by the City.

Should a Proposal be accepted, a purchase order will be issued for the provision of these services. Contract documents will be utilized to document the agreement fully and completely.

### 1.11 Negotiation

The City reserves the right, prior to contract award, to negotiate changes to the scope of the services or to the contract documents (including pricing to meet budget) with the highest ranked Proponent and then consecutively, any one or more Proponents, proposing the "best value" without having any duty to advise any other Proponent or to allow them to vary their Proposal as a result of changes to the scope of the services or to the contract documents; and the City may enter into a changed or different contract with the proponent(s) proposing the "best value", without liability to Proponents who are not awarded the Contract.

### 1.12 Litigation

The City may, at its absolute discretion, reject a Proposal if the Proponent, or any officer or director has been engaged directly or indirectly in a legal action against the City, its elected or appointed officers, representatives or employees in relation to any matter, or if the City has initiated legal action against any officers or directors of the Proponent.

In determining whether or not to reject a Proposal, the City will consider whether the litigation is likely to affect the Proponent's ability to work with the City, its consultants and representatives and whether the City's experience with the Proponent indicates there is a risk the City will incur increased staff and legal costs in the administration of an agreement if it is awarded to the Proponent.

## 2. GENERAL CONDITIONS OF CONTRACT

### 2.1 Terms and Conditions

The City's [Terms and Conditions](#), as published on the City's website, the Conditions listed below, the Request for Proposals Documents, Appendices, along with the accepted Proposal, addenda and any subsequent clarifications, correspondence, the totality of which will constitute the Contract.

### 2.2 Project Specific Terms and Conditions

#### a) Permits Regulations

The Contractor is to obtain permits, pay all fees therefore and comply with all Provincial, Municipal and other legal regulations and by-laws applicable to the work. If no local regulations, comply with the National Building Codes of Canada, latest revision. Workers Compensation Act and Workplace Hazardous Material Information System ("W.H.M.I.S.") requirements and regulations are to be strictly adhered to.

#### b) On-Site Hazards and Utilities Present

- i. The Contractor is to make themselves aware of any and all on-site hazards including but not limited to underground and overhead utilities in or near to the work area and to take every precaution necessary to eliminate any risk that may exist. If an on-site hazard exists that is causing or may cause injury to any person(s), the Respondent is to take immediate action to mitigate risk and damage, and then to notify the City's contact person.
- ii. The locations of all such hazards are to be investigated and verified in the field by the Contractor.

### 3. SCOPE OF SERVICES

#### 3.1 Purpose

The City requires a qualified, experienced Contractor to provide labour, equipment, materials, fuel, transportation, overhead and all that is necessary for the replacement of the Desiccant De-Humidifier Replacement (the 'Services') at the Poirier Sports and Leisure Complex.

#### 3.2 Locations

The address for the Desiccant De-Humidifier Replacement is as follows:

Poirier Sports and Leisure Complex  
633 Poirier Street  
Coquitlam, BC

#### 3.3 Scope of Services

The work is to generally include but not limited to:

- i. Mobilization
- ii. Pedestrian and traffic control measures
- iii. Removal & Disposal – removal of existing De-Humidifier Unit and disposal/recycling of the unit
- iv. Supply & Installation of Desiccant Dehumidifier - as per Appendix A – Specifications and Appendix B – Drawing
- v. Delivery - Rooftop delivery of 1 x New Desiccant De-Humidifier Unit, inclusive of craning services or other required services
- vi. Associated Work -replacement of Roofing - as required, Utility Connections - as required
- vii. Commissioning – **To be completed by the Manufacturer.** Commissioning involves install and testing/commissioning prior to ice-making and will also include an addition visit to start-up the unit once the ice is back in.
- viii. Final Clean-Up
- ix. Substantial Completion
- x. Project Close-Out - as built drawings, warranty documentation and other information to be submitted to the City

#### 3.4 Specification of Goods

The New Desiccant De-Humidifier Unit shall be:

- 1 x New Munters A20-1300G Desiccant De-Humidifier Unit – see Appendix A Specifications

**NOTE: Alternates to the specified unit will not be accepted.**

### 3.5 Appendices

The following Appendices are attached to this RFP:

- Appendix A – Technical Specifications
- Appendix B – Technical Drawings

### 3.6 Warranty/Guarantee

Contractor is to provide a detailed copy of the warranty, showing inclusions and exclusions.

All warranty/guarantee costs to be included in their Proposal price. The City will not pay any additional fees or charges for any warranties or guarantees.

### 3.7 Work Schedule and Work Hours

All work is to be performed during the week of June 9<sup>th</sup> – 15<sup>th</sup> 2019

All work is to be completed during regular working hours unless approved by Owner

The Contractor is to submit a schedule to the City for approval.

All Services are to be performed in compliance with City Bylaws.

The Contractor may apply for exemptions to the noise by-laws to work weekends. The City does not guarantee exemptions will be granted. No shift premiums will be paid for weekend work.

### 3.8 Clean Up

At the end of each day and at the conclusion of work, the Contractor shall promptly remove any of his/her equipment or materials and leave the site(s) in a clean and cleared condition.

### 3.9 Progress Report

The Contractor is to provide progress reports to the City's representative as requested.

### 3.10 Testing, Inspection and Quality Assurance

Where tests or inspections reveal workmanship or materials not in compliance with the specifications as stated within this RFP, the Contractor shall pay for the cost of additional tests ordered by the City to verify acceptability of corrected work. Extensions to the Contract shall not be allowed for any delay occasioned by the above requirement.

The City will pay the cost of testing ordered by the City for Quality Assurance.

### 3.11 Site Control and Safety

The Contractor shall at all times be responsible for maintaining safety zones around the worksite with safety barricades and signage to protect workers, City Staff and Public.

The Contractor shall take adequate measures to protect the public, City staff, and all others on site from injury, damage, or other loss resulting from activities in performing the Services.

The Contractor shall provide Signage at the Work zone.

The Contractor shall at all times keep the site secure, safe, clean and orderly as the Work allows, with the removal of trash and debris daily.

### 3.12 Traffic Control

The Contractor is to conform to the City traffic's requirements, and shall be responsible for all traffic control and adhere to the standard procedures and practices prescribed in the Ministry of Transportation and Highways "Traffic Control Manual for Work on Roadways".

3.13 Operations and Coordination of the Services

The Contractor shall agree to coordinate the execution of the Services with the City such that disruption of the work of all involved is minimized.

3.14 Contractor's Equipment and Workmanship

Contractor's personnel shall be trained in the correct methodology, equipment safety inspection, and safe operation for the Services.

All vehicles and equipment will be kept clean, in good mechanical condition, painted to present a neat appearance, show evidence of annual safety inspections and display proper registration and license.

All Contractor's vehicles and equipment shall be equipped with approved back-up alarms, multiple light revolving/strobe lights, or other necessary warning systems which shall be maintained and in proper operating condition at all times.

In the event of a breakdown, the Contractor shall arrange for reserve equipment, with always the intent to deliver and complete the Services as per this Agreement.

3.15 Rectify Damages

The Contractor shall make good any damage or spillage to adjacent buildings, areas, grounds, or vehicles at no cost to the City and leave the site in the same state as it was prior to commencement of the Work and to the satisfaction of the City. All Work shall be carried out so as to ensure the minimum interference with normal use of public spaces and facilities. The Contractor shall be responsible to pay the full cost of any repairs for all damage to curbs, pavement, existing structures, etc. if caused by the Contractor during the contract period.

Damage to landscape and infrastructure shall be reported promptly.

3.16 Rejected Work

Defective Work, whether the result of poor workmanship, use of defective products or damage through carelessness or other act or omission of the Contractor, shall be rectified at the Contractor's expense.

3.17 Quality of Work

All Work shall be performed by skilled persons including, if required, the abatement of hazardous materials in strict accordance with the applicable Municipal, Provincial, Federal and other laws, regulations, standards, codes, etc. All workmanship and materials will be subject at any time to the inspection and approval of the City.

The Contractor and persons hired by it to perform the Work shall at all times be properly attired and shall be courteous to the public and perform the work in a manner that minimizes any inconvenience or nuisance to the public.



# Munters

## Munters DryCool Dehumidification System

### Dehumidification Equipment Submittal

E I Solutions  
Victoria, BC

Quotation number

Model Number(s):

Rev 01

Submitted by Jalal Elarid  
Date: 07/5/2018

### Munters Sales Point of Contact

Jalal Elarid 250-514-7078

### Munters Service / Start-Up Scheduling

210 651-5018

### Munters Corporation - Dehumidification Division

16900 Jordan  
Selma, TX 78154  
210 651-5018

## Approval Return Sheet

*Munters must have written approval  
prior to scheduling the unit for production.*  
**Please remove and fax or mail to Munters.**

### **Engineer / Contractor Submittal Review**

- Reviewed and Approved.
- Approved as noted, see attached comments.
- Revise and resubmit, see attached comments.
- Rejected, contact me immediately.
- \_\_\_\_\_
- By: \_\_\_\_\_
- Date: \_\_\_\_\_

### **Unit Description**

E I Solutions  
Victoria, BC

Quotation number

Model Number(s):  
Rev 01

### **Munters Project Contact**

Enter Name @ Phone

### **Fax or mail to:**

**Munters Corporation - Dehumidification Division**  
16900 Jordan  
Selma, TX 78154  
Phone 210 651-5018  
Fax 210 651-9085

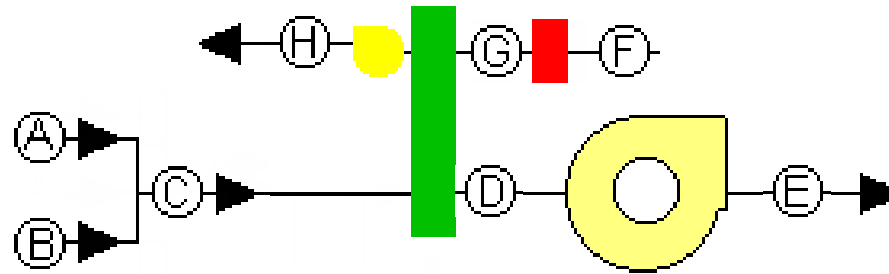


**City of Coquitlam RFP 19-01-04  
Appendix A - Technical Specifications**

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E I Solutions - Poirier Sports Complex



Summer

	A	B	C	D	E	F	G	H
SCFM	3500	4000	7500	7500	7500	2095	2095	2095
°F	73	60	66	107	110	73	263	120
gr/lb	86	35	59	15	15	86	118	273

**City of Coquitlam RFP 19-01-04**  
**Appendix A - Technical Specifications**

<b>EQUIPMENT DATA SHEET MODEL DDS20</b>		
MANUFACTURER		MUNTERS DRYCOOL
MODEL NUMBER		DDS20
<b>DESIGN DATA</b>		
OUTSIDE AMBIENT (DB / GR/LB)		73 / 86
RETURN AIR (DB / GR/LB)		60 / 35
DELIVERED AIR (DB / GR/LB)		110 / 15
SUPPLY AIR VOLUME (SCFM)		7,500
MAKE UP AIR VOLUME (SCFM)		3,500
<b>PROCESS FAN</b>		
SIZE		27X90% / SWSI
TYPE / CLASS		BI-AF / II
AIR FLOW (SCFM)		7,500
TOTAL STATIC PRESSURE (IN WC)		5.1
EXTERNAL STATIC PRESSURE (IN WC)		1.2
FAN RPM		1750
MOTOR HP		15
<b>REACTIVATION FAN</b>		
SIZE		15X90% / SWSI
TYPE / CLASS		BI-AF / II
AIR FLOW (SCFM)		2,095
TOTAL STATIC PRESSURE (IN WC)		6.6
FAN RPM		3450
MOTOR HP		5
<b>REACTIVATION HEATER - NATURAL GAS</b>		
TYPE OF GAS		NATURAL
MAX CAPACITY INPUT (BTUH)		750,000
DESIGN CAPACITY INPUT (BTUH)		467,276
STAGES OF CAPACITY		MODULATING
GAS PRESSURE REQUIRED (IN WC)		6 - 15
GAS PRESSURE AT PILOT (IN WC)		3.5
MANIFOLD PRESSURE (IN WC)		4.5
BURNER AIR PRESSURE DROP (IN WC)		0.7
<b>DESICCANT WHEEL</b>		
		<b>51" X 400mm Tigel</b>
MOISTURE REMOVAL (LB/HR)		210
PRESSURE DROP PROCESS (IN WC)		2.00
PRESSURE DROP REACTIVATION (IN WC)		2.24
WATER REMOVAL EFFICIENCY (BTU/LB)		2,045
HEAT TRANSFER EFFICIENCY (BTU/LB)		1,563
<b>FILTERS</b>		
<b>ELECTRICAL</b>		
SYSTEM VOLTAGE (V/P/H)		575/3/60
CONTROL CIRCUIT VOLTAGE		110/1/60
PROCESS FAN MOTOR (AMPS)		14.3
REACTIVATION FAN MOTOR (AMPS)		.0
DESICCANT WHEEL MOTOR (AMPS)		.0
CONTROL TRANSFORMER (AMPS)		1.7
UNIT FLA (AMPS)		14.3
UNIT MCA (AMPS)		17.9
UNIT MOP (AMPS)		30

# City of Coquitlam RFP 19-01-04

## Appendix A - Technical Specifications

### PART 1 GENERAL

#### 1) WARRANTY / GUARANTEE

- A) The DryCool Dehumidification System (DDS) and any auxiliary components provided by the manufacturer shall be warranted free from defects in workmanship or material for a period of 12 months from date of factory documented startup, or 18 months from date of original shipment. The basis of design is Munters. Named alternate manufacturers who do not manufacture the active desiccant dehumidification wheel must provide a 5 year parts and labor warranty for the wheel. If any defects appear under this warranty, the manufacturer shall be notified by the owner, and the manufacturer shall provide appropriate replacement parts at no cost to the owner other than freight. The owner shall be responsible for labor performed in replacing parts provided by the manufacturer.
- B) Honeycombe Wheels  
Munters warrants its Titanium-enhanced Silica Gel Honeycombe wheels to be free from defects in workmanship and material for a period of five years from the date of original shipment.

### PART 2 PRODUCT

#### 1) HOUSING

##### A) Unit Base

- 1) Unit base shall be bolted steel construction with formed 12 gauge galvanized steel channels around the outside perimeter and reinforced with galvanized steel cross members bolted on centers not exceeding 31 inches. Base shall have a minimum of four lifting brackets bolted in place.

##### B) Unit Case

- 1) The unit casing shall be constructed using a double wall panel and frame system for torsional rigidity. This includes walls, floors and ceilings. This system shall not contain any through metal. The unit casing shall also meet the following criteria based on ASTM E84-90 (Standard Test Method for Surface Burning of Building Materials), flame spread = 25, smoke index = 50.
- 2) The frame system components shall be constructed of fiberglass reinforced plastic (FRP) pultruded members. Horizontal frame members shall be supported along their length by intermediate supports and internal partitions. Through metal systems shall not be allowed. To avoid condensation, heat loss or loss of cooling capacity, each panel shall be 2 inches thick and constructed such that there are no through metal connections between the exterior surface and the interior surface. The exterior casing shall be 22-gauge corrosion resistant galvalume. The interior casing shall be 22-gauge galvanized steel. Manufacturers not providing exterior galvalume construction must provide painted galvanized exterior panels. Painted coating must be corrosion resistant exceeding ANSI 2000 hour salt spray standards. Panels shall be foam injected into individual panels with a density of 2-1/2 lb/ft<sup>3</sup>. The heat transfer rate through casing walls shall be less than 0.0625 Btu/sq. ft./°F equivalent to an R-value of 14. This construction shall be suitable for a 50 F difference as tested between process air dry bulb temperature and the dew point of the air surrounding the plenum. The unit casing shall be manufactured as an air and vapor tight system. There shall be a gasket system which seals the panels to the structure. Fixed panels shall be provided with flat closed cell neoprene and be sealed in place with FDA approved silicon. Doors and plug panels shall be provided with polyvinyl chloride seals.

##### C) Access Doors and Plug Panels

- 1) Access doors or plug panel doors will be provided as indicated on the drawings. Doors shall be rigid double wall construction and shall use heavy-duty hinges with lockable latches on each door. Doors shall be a minimum of 30.5" in width and be the full height unit plenum. Doors shall be of the same construction as panels. Hinges shall be installed by locating hinges no more than 36 inches on center from hinge to hinge. Door latches shall be capable of being fully tightened against gasket surfaces. All major components such as coils, filters, blowers, etc., within the air handling structure shall be easily removable through access panels without dismantling plenums or distributing ductwork. Equipment that requires disassembly of

# City of Coquitlam RFP 19-01-04

## Appendix A - Technical Specifications

components rather than access through removable or hinged panels shall not be acceptable. The unit casing shall include access panels for inspection and for any maintenance required by the operating and maintenance manual. Panels without gaskets shall not be acceptable.

### D) Weather Protection

- 1) The dehumidification system shall be capable of continuous outdoor operation. The air inlets shall be protected from flowing water by mist eliminators or connected duct work. Consequently, all access panels shall be weather tight, as shall all joints between casing and electrical conduits and between the unit casing and any components mounted in separate enclosures.
- 2) For outdoor units a roof shall be fabricated using a capped standing seam style construction. Outside air inlets shall be provided with mist eliminating architectural louvers and rain hoods. Mist eliminating louver shall be an extruded aluminum construction utilizing a 2" vertical blade with a 2 phase separation chamber per blade. Frame shall be no less than 2 3/8" deep and arranged with bottom front drainage. Standard AMCA testing shall show beginning of water penetration to be not less than 930 FPM. The pressure drop through the louver shall not be not more than 0.125". Louvers shall bear the AMCA Seal and have its ratings certified to comply with AMCA Publication 511.

### 1) DESICCANT WHEEL

The desiccant wheel media shall be a monolithic, extended-surface contact medium, fabricated entirely of inert, inorganic binders and glass fibers formed into narrow passages in the direction of airflow. The wheel shall be non-toxic. It shall also meet the following requirements:

The process and reactivation air streams shall be separated by air seals and internal partitions so that the humid reactivation air does not mix with the dry process air. Suppliers who do not also manufacturer the active desiccant dehumidification wheel must provide a 5 year parts and labor warranty for the wheel. Manufacturers must provide the desiccant dehumidification capacity without exceeding a gas usage specified. Manufacturers exceeding gas usage specification must provide a deduct of \$ 2000 per therm. Acceptable manufacturers must be able to procure replacement if required within 24 hours or provide a spare stock for each unit size. The proposed equipment shall meet the following minimum requirements:

#### A) Wheel Face Seals

The dehumidifier shall have full-face seals on both the process air entering and the process air leaving sides of the wheel. These shall seal the entire perimeter of both air streams as they enter and leave the wheel. Partial seals shall not be acceptable. The seals shall be the silicone rubber bulb-type, with a protective strip of low-friction, abrasive-resistant surface to extend seal life and reduce the force needed to turn the desiccant wheel. Neither wiper-type seals nor brush-type nor any non-contact-type seal shall be acceptable. The seals shall be documented to have a minimum working life of 25,000 hours of normal operation.

#### B) Materials

The glass fibers which form the support matrix shall be made from uniform continuous strands larger than five microns in diameter which are nonrespirable and are not considered a possible health risk by the International Agency for Research on Cancer (IARC).

#### C) Flame spread and smoke generation

The wheel shall be tested according to ASTM E84-90 (Standard Test Method for Surface Burning of Building Materials) and shall achieve the following results:

- 1) Flame spread index = 0
- 2) Smoke developed index = 10

#### D) Desiccant impregnation

The desiccant shall be evenly impregnated throughout the structure for predictable, consistent performance and for maximum wheel life. Coatings applied on top of the contact medium shall not be acceptable unless the manufacturer can provide independent life tests demonstrating less than a 5% decline in desiccant capacity over a five year period of normal operation.

#### E) Desiccant type

The desiccant impregnated into the contact medium shall be:

# City of Coquitlam RFP 19-01-04

## Appendix A - Technical Specifications

### 1) Titanium-reinforced silica gel

The Honeycombe desiccant wheel shall be a fabricated extended surface contact media with a multitude of small passages parallel to the airflow. The rotary structure shall be a monolithic composite consisting of inert silicates with microscopic pores designed to remove water in a vapor phase. The desiccant shall be hydrothermally -stabilized silica gel reinforced with titanium for maximum strength and stability over time. The fabricated structure shall be smooth and continuous having a depth of 400 or 200 millimeters, as specified in unit schedule, in the direction of airflow without interruptions or sandwich layers which restrict air flow or create a leakage path at joining surfaces. Nominal face velocity shall not exceed 800 fpm. The Honeycombe wheel shall be manufactured in the United States. The manufacturer shall provide documentation to establish that:

- (a) The desiccant retains more than 90% of its original capacity after ten years of continuous operation in clean air, with inlet air conditions up to an including 100% relative humidity.
- (b) The wheel as impregnated with silica gel is capable of withstanding five complete water immersion cleaning cycles while retaining more than 95% of its original adsorption capacity.

### 2) DESICCANT WHEEL SUPPORT AND DRIVE ASSEMBLY

Desiccant wheels less than 86" in diameter shall be a single piece for fast removal and simple handling. The desiccant wheel shall be supported by four rollers at the base of the unit so the wheel can be easily removed by lifting it over the rollers using the drive belt. Center-axle support or any arrangement which requires disassembly of the support structure for wheel removal shall not be acceptable. In addition, the wheel drive assembly shall provide:

#### A) Rotation speed

To avoid excessive heat carryover from reactivation to the process air, the wheel rotation speed shall not exceed 16 rph while achieving the required moisture removal rate at the specified conditions.

#### B) Drive belt

The drive belt shall be the flat, toothed type, with aramid fiber reinforcement.

#### C) Drive motor

The drive motor shall be fractional horsepower and rated for continuous duty for a period of 20,000 hours under the load conditions imposed by the drive assembly.

#### D) Rotation detection

The drive assembly shall be equipped with a rotation detection circuit which shuts down the dehumidifier and signals the operator through an indicating light on the control cabinet if the wheel is not rotating.

### 1) REACTIVATION CIRCUIT

The reactivation circuit shall conform in all respects to the current National Electrical Code.

#### A) Direct-fired natural gas reactivation

- 1) The direct-fired raw gas burner shall have a rust-resistant cast iron air-fuel manifold and stainless steel air mixing plates. The burner assembly shall be mounted inside a housing constructed of G-90 hot dipped galvanized steel. The housing shall be welded and equipped with internal insulation of fibrous glass with a minimum thickness of 1 inch.
- 2) Burners with less than 401 MBH input capacity shall be equipped with a single-stage combination gas valve. The complete pilot ignition system has been A.G.A. design certified to A.N.S.I. Standard Z21.7A-1985 "Automatic Intermittent Pilot Ignition Systems for Field Installation.". Gas valves and ignition control units also are A.G.A. design certified (separately) to applicable A.N.S.I. standards:

Z21.15	Manual Gas Valves
Z21.18	Gas Pressure Regulators
Z21.20/Z21.20A	Automatic Ignition Systems
Z21.21/Z21.21A	Automatic Valves

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## Appendix A - Technical Specifications

Z21.35

### Gas Filters

The butterfly valve utilized for gas flow control is a UL recognized component. The actuator provided to modulate the valve is powered by a UL listed Class 2 cover mounted transformer.

- 3) Burners with 401 MBH and greater input capacity shall be equipped with a general-purpose ANSI-standard gas train with redundant fluid power valves rated for duty at the specified gas supply pressures.
- 4) Reactivation energy shall be automatically matched to dehumidification requirements by means of a modulating gas valve with proportional electric valve actuator. The valve/actuator assembly shall be connected to a temperature sensor/controller mounted in the discharge of the reactivation air stream.

### 1) FILTERS

#### A) Reactivation Filter

The unit shall include a disposable pleated filter with 25% to 30% minimum efficiency with 90% to 92% arrestance minimum as rated by ASHRAE Test Standard 52-76.

#### B) Standard Medium Efficiency Filters

The unit shall include removable filters at the inlet of both process and reactivation air streams. These filters shall be mounted on sliding racks and accessible through access panels. All supply air is filtered through filters of 25% to 30% minimum efficiency with 90% to 92% arrestance minimum as rated by ASHRAE Test Standard 52-76. Filters are disposable 2" deep, pleated disposable type with non-woven media held in place by a welded wire grid. Filters are held in aluminum channels top and bottom with spacers and back-up plates to minimize bypass. Filter channels are welded and sealed in place to eliminate air bypass.

### 2) FANS

#### A) General Requirements

Blowers provide the specified air volume(s) through the system with adequate static pressure to overcome duct and distribution losses specified. Blowers are of the non-overloading, backward inclined, air foil blade type for air volumes greater than 1000 scfm. Blowers are direct or belt drive provided fan speed does not exceed 80% of the fan shaft critical speed. Access shall be provided on both sides of the supply blower for inspection and servicing. All fans shall be rated in accordance with AMCA Standard 210. Fan motors shall be TEFC, high efficiency type with Class B insulation and a 1.15 service factor

#### B) Construction

Fans shall be single width-single inlet (SWSI) housed construction if mounted on exterior of unit housing. Fans shall be single width-single inlet (SWSI) plenum type if mounted interior to the unit housing.

#### C) Balancing

Fans shall be balanced after assembly and after coating at the speed the unit is scheduled to operate. Fans are balanced such that the maximum displacement in any plane does not exceed 1.5 mils for fans operating at or below 2000 rpm or 1.0 mils for fans operating above 2000 rpm.

#### D) Belt Drive Fans

For fan motors of 10 hp and smaller, the belt-drive shall be selected for 120% of rated capacity. For fans driven by motors larger than 10 hp, the drive shall be selected for 150% of rated capacity. All belt-driven fans shall be equipped with:

- 1) Motors mounted on slide rails or bases and belt tension is adjustable without repositioning of belt guard.
- 2) Fan assemblies mounted on a rigid structural steel base supported at not less than 4 points by rubber-in-shear or spring type vibration isolators. Overall isolation efficiency is not less than 95% at the design fan speed.
- 3) Fan and base assembly shall be equipped with not less than 3 tie down bolts for stability during shipment to prevent damage.

#### E) Direct Drive Fans

Direct drive blowers are 1725 or 3450 RPM. Direct drive blowers are mounted on vibration pads or rubber-in-shear type vibration isolators. Overall isolation efficiency is not less than 95% at the design blower speed.

#### F) Fan Motors

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## Appendix A - Technical Specifications

Fan motors shall be the totally-enclosed fan-cooled (TEFC), high-efficiency type with Class B insulation and shall be selected for a service factor of 1.15.

### 3) CHILLED WATER COOLING COILS

- A) Coils shall be sized to provide the full capacity scheduled. Coils shall be arranged to condition the full volume of process air with bypass or balancing dampers as required. Tube water velocities are 6 fps or less and air face velocities are 500 fpm or less. Coil circuiting provides for optimum performance with minimum pressure loss. Coil shall be designed for 250 PSI working pressure and factory tested under water at 300-PSI air pressure.
- B) Chilled water coils are fin and tube type, constructed of seamless copper tubes of 5/8-inch diameter with 0.016 inch wall thickness and aluminum plate type fins of .006 inch thickness, mechanically bonded to tubes. Casing and tube support sheets are 16 gauge galvanized steel formed to provide mounting flanges and structural support for the finned-tube assembly. Supply and return headers are heavy wall copper pipe with vent and drain connections. Supply and return connections are brazed in place with sweat connections for piping. Coils conform to ARI standard 410.

### 4) DIRECT EXPANSION (DX) COOLING COILS

- A) Coils shall be sized to provide the full capacity scheduled. Coils shall be arranged to condition the full volume of process air with bypass or balancing dampers as required. Refrigerant pressure drop to be between 1.5 psi and 5 psi, and air face velocities are 500 fpm or less. Coil circuiting provides for optimum performance with minimum pressure loss. Coil shall be designed for 250 PSI working pressure and factory tested under water at 300-PSI air pressure.
- B) Direct expansion cooling coils are fin and tube type constructed of 0.016 inch seamless copper tubes and .006 inch thickness aluminum fins mechanically bonded to tubes. Casing and tube support sheets are 16 gauge galvanized steel formed to provide mounting flanges and structural support for the finned-tube assembly. Supply header consists of a distributor to feed liquid refrigerant through seamless copper tubing to all circuits in the coil equally. Tubes are circuited to insure minimum refrigerant pressure drop and maximum heat transfer. Fin spacing of up to 12 FPI provides adequate transfer area to minimum air pressure drop. Coils are mounted for counterflow and have a maximum air face velocity of 500 fpm. Direct expansion coils conform to ARI Standard 410 and are compatible with all other components of the same refrigeration circuit.

### 5) DRAINS PANS

- A) The drain pan is to be constructed of welded 304 SS and bolted in place. The cooling coil drain pan shall extend the entire length of the coil and extend a minimum of 4 inches beyond the air leaving side of the coil. Drain pans with a single drain connection shall be double-sloped to ensure zero standing water. Drain pans with drain connections on both sides of the unit shall use a single-sloped drain pan, sloped in the direction of airflow. Drain connection shall extend through unit base. Connection(s) to be 1 inch male NPT.

### 6) REFRIGERATION CONDENSING UNITS

- A) Condensing units are complete with compressor(s), condenser heat exchanger, optional receiver tank (if required) and all controls and accessories required to regulate refrigerant pressure, flow rates and temperatures. The condensing unit is piped together with evaporator coil(s) and is sized and controlled to operate at all conditions required. Condensing units manufactured by a separate company and then mounted and piped and a single skid are not acceptable.
- B) Compressors are scroll type. Service Access shall be provided around the entire compressor for maintenance. Isolation valves shall be provided in the refrigeration circuit to allow removal of pressure sensors and other control instruments. Condenser fans shall be provided with fan guards both on the intake and discharge. Condensing unit section shall be accessed through access doors. Access panels are not acceptable. Condenser coils shall be provided with exterior coil guards to prevent damage.
- C) All piping connections are brazed using a filler material with not less than 15% silver content for copper to brass joint. Brazing flux is used on all joints and all interior surfaces of brazed assemblies are exposed only to dry nitrogen during heating and cool down periods. All refrigeration tubing is copper, type "L", hard drawn, cleaned and capped, designed specifically for refrigeration service. All piping circuits contain thermostatic expansion valve with external equalization and M.O.P. feature, liquid line solenoid valves, liquid line sight glass, liquid line



# City of Coquitlam RFP 19-01-04

## Appendix A - Technical Specifications

filter/dryer , and optional hot gas regulating valve and auxiliary side connector. All components are completely installed in piping circuit and all joints leak tested with refrigerant charge and electronic leak detector prior to evacuation, final charging and complete factory testing and set-up. All assembly and testing work is performed at the factory prior to shipping. All refrigeration circuits are pumped down, valved off and shipped with the full refrigerant charge ready for on site start-up.

### 7) INDIRECT FIRED POST HEATER

- A) Heater shall conform to ANSI Z83.9. Unit shall be suitable for operation on natural gas or propane as specified. Unit shall be of downblast or horizontal configuration. Unit shall have an input rating of 400 MBH on high firing rate and 200 MBH on low firing rate. Where input is greater than 400 MBH multiple heaters shall be used. It shall contain tube type heated exchangers, flue gas collector with vent fan, in shot burners, and controls for high and low fire. Unit shall be un-housed and fit within the unit housing envelop dimensions.
- B) Burners shall be die formed in shot type with adjustable air shutters. Burners must be individually removable for cleaning or service. Entire burner assembly must be easily removable as an assembly.
- C) Unit shall have a powered venting system consisting of a collection box, direct drive vent fan and ana air proving switch. The collection box shall be made of the same material as the heat exchanger bulkhead plate and shall be removable. The venting fan bearings shall have a minimum L10 bearing life of 24000 hrs. The vent fan shall exhaust the flue gas horizontally out the side of the unit. The unit fan shall operate on 120/1/60 and not exceed 2 FLA.
- D) Tubes shall be permanently attached to a bulkhead plate to form an airtight seal between combustion byproducts and heated air system. Heat exchanger shall be constructed of 18 gauge aluminized tubes with 14 gauge aluminized steel bulkhead plate. Heat exchanger shall be rated for a minimum lifespan of 100,000 cycles.
- E) Gas train shall utilize components certified by AGA. Gas train shall consist of a 24 VAC two stage combination valve (manual on-off, automatic safety shutoff, regulation to handle 0.5 psig input pressure and adjustable pilot valve). The combination valve shall be rated at a flow of 400 MBH. The valve shall feed inshot burners through a manifold with screw in brass orifices sized for either natural gas or propane, as required by unit schedule. The flame controllers shall be solid state module that operates on 24 VAC. It shall have a built in spark ignitor and flame sensor with 100% gas shutoff. The pilot shall be ignited during each cycle of operation. After the pilot is proven, the main burner valve shall open. Pilot and main burners shall be extinguished during the off cycle. The thermal disc type high temperature limit switch shall shut off main and pilot valves if an overheat occurs.

### 8) ELECTRICAL CONTROL CABINET

The electrical control cabinet shall be weather tight to NEMA 3R standards and shall include:

- A) Wiring to comply with the current National Electrical Code with further fuse and wiring sizing to meet or exceed UL 508A Industrial Control Panel.
- B) Wires shall be color-coded or numbered at both ends and all terminal block connection points shall be numbered. These markings shall correspond with the electrical diagram provided in the operating and maintenance manual.
- C) Components shall be UL or CSA approved where possible.
- D) Control System  
The unit sequence of operations shall include separate indication for:
  - 1) Power on
  - 2) Unit running
  - 3) Desiccant wheel rotation fault
  - 4) Burner fault
  - 5) High Condensing pressure (packaged condensing units)
  - 6) Motor overload
- E) Operating and maintenance manual  
The control cabinet shall include a copy of the O & M manual, mounted in a separate compartment or pocket to

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**Appendix A - Technical Specifications**

allow access to critical information by maintenance personnel after installation.

F) Disconnecting Means

Unit shall have a built in non-fused means of disconnecting from the power supply.

## **EQUIPMENT WARRANTY**

Munters warrants all its equipment to be free from defects in workmanship and material under normal usage for a period of 12 months from factory documented start up or 18 months from date of original shipment, whichever is shorter. Munters will repair or replace, at its option, any such equipment determined to be defective during this one-year period. The Basic Product Warranty is a 'Parts Only' warranty. Munters shall ship parts or products (equipment) repaired or replaced under this warranty to the customer F.O.B. factory. Method of shipment shall be standard ground transportation at Munters' expense. Munters shall not bear the cost of expedited delivery.

The foregoing warranty does not apply to:

Any equipment or part that has been misused, used for any purpose other than its intended purpose, or that has not been installed, maintained and operated under normal conditions with competent supervision in accordance with the equipment instruction manual and Munters' recommendations; or

Any equipment or part that has been disassembled, repaired or tampered with in any way, except when such work has been done [by an authorized service representative] in accordance with Munters' service guidelines; or

Damage or operational problems caused by excessive corrosion, or excessive dirt, dust or other foreign material; or

Installation or connection of external ductwork; electrical power and signals; or supplied air, water and gas; or

Components supplied by customers or others; or

Labor, equipment or crane charges associated with the removal or replacement of defective components.

This warranty covers replacements and repairs or adjustments, at Munters discretion, made at a Munters' factory or by factory personnel. If the services of a Munters Service Technician are required at the site where the equipment or part is installed, or at any other location other than Munters' factory, buyer will be responsible for the cost thereof and a purchase order shall be issued to Munters. In such cases that Munters is prevented from providing timely service through its employees or contractors, the customer accepts full responsibility for any warranty claim.

## **FIVE YEAR WARRANTY FOR MUNTERS HONEYCOMBE WHEELS**

### **Munters Commercial DH Division- 5 Year Prorated Desiccant Wheel Warranty**

Munters warrants the desiccant wheel to be free of defects in material and workmanship for a period of up to five years from the date of original shipment.

The foregoing does not apply to:

1. Damage caused by misuse or any improper maintenance or contamination of the Honeycombe wheel media; or
2. Damage caused by other component malfunction or operation of the equipment beyond the specified conditions

Should this desiccant wheel be found to be defective due to material or workmanship within the specified warranty period, Munters shall repair or replace the desiccant wheel at its option.

If the wheel is determined to be defective and not repairable, the wheel will be replaced as per the prorated schedule below. A credit will be applied towards the cost to replace the desiccant wheel. The replacement costs do not include freight or labor to remove or reinstall the wheel.

This warranty is not transferable and does not cover normal wear and tear or damage caused by improper use. The warranty is also voided if the purchaser modifies the desiccant wheel or original equipment in any way.

**Prorated Schedule**

Year	Percent Credit
1	100%
2	80%
3	60%
4	40%
5	20%

STEAM REACTIVATED SYSTEMS: Munters will only repair or replace leaking steam coils under warranty when accompanied by a water quality report from an independent, qualified laboratory showing the chemical analysis of the steam associated with these coils. These tests must show pH values and sulfur content within the ranges associated with proper steam operating ranges. Proper steam piping, per manufacturer's recommendations, must be applied to any steam coil installations to prevent contamination and possible water hammering that could lead to leaks.

**LABOR WARRANTY**

Munters' obligation under this warranty for labor is limited to correcting any improperly performed start-up labor, for a period of ninety (90) days. Customer is responsible for providing clear access to equipment.

**CLAIM PROCEDURES**

If any defect appears in the equipment during the applicable warranty period:

1. Buyer shall notify Munters of the defect in writing within 10 days of a problem occurrence, including in such written notice the model, serial number and part number of such equipment or defective part thereof, and a description of the nature of the defect.
2. Buyer shall file a completed start up report within ten days of a customer supplied start up of product. If not filed as indicated, warranty term shall extend no longer than 12 months from shipment. To file a start up report customer shall send information to Munters Service Department, 16900 Jordan Rd, Selma, TX 78154. At a minimum the customer start up information shall include start up conditions, equipment performance, date, time, serial #, model #, project name, installing contractor, contact personnel, phone, site owner and contact information.
3. Obtain a warranty service authorization to repair or replace defective equipment and / or a service authorization to return equipment believed to be defective.
4. After receipt of such information, Munters will ship a replacement, F.O.B. Munters factory, and will invoice the buyer therefore, and for shipping charges, if applicable.
5. Upon receipt of written authorization from Munters, buyer shall return the defective equipment or part to Munters with shipping charges prepaid.
6. Upon receipt of the equipment or part by Munters, the cause of the failure will be analyzed and, if equipment or part is found to be defective in workmanship or material, a credit will be issued for the cost of the replacement or repair of said equipment or part. Any special shipping requests such as "Next Day Air" will be the customer's responsibility and will be sent "freight collect".

Munters assumes no responsibility for any incidental or consequential damage to structures (including, but not limited to, any ductwork, roofing materials, outbuildings or piping) or any other equipment caused by any defective equipment or part or the removal or replacement thereof.

This warranty does not include labor. The customer is responsible for labor, including the cost of problem diagnosis and all costs associated with the removal and reinstallation necessary to accomplish the repair or replacement of defective components. This warranty does not include delivery of materials to the job site or rigging, scaffolding, lifts or labor necessary to install replacement equipment or parts. Buyer is responsible for lifting requirements, cranes, unpacking, etc., as well as removal of previously supplied or installed materials.

# City of Coquitlam RFP 19-01-04

## Appendix A - Technical Specifications

To keep this warranty in full effect, the customer must adhere to the requirements set forth in Terms of Sale; maintain the product according to written instructions in the installation, operation and maintenance (IOM) documents. Failure to return a completed start-up report to Munters Service Department within 10 days of a customer supplied start-up voids this warranty.

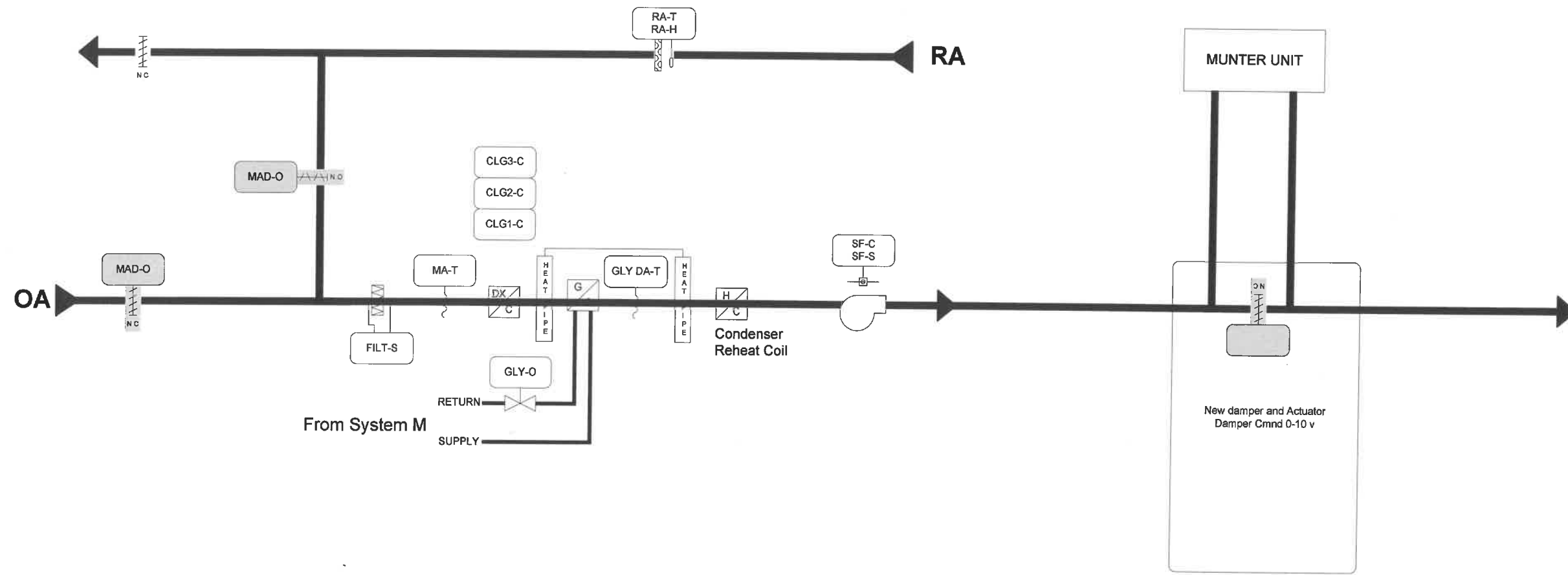
### **EXCLUSIVE REMEDY**

MUNTER'S OBLIGATION, AND BUYER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY, IS LIMITED TO REPAIR OR REPLACEMENT, AT MUNTERS' OPTION, OF ANY EQUIPMENT DETERMINED TO BE DEFECTIVE IN WORKMANSHIP OR MATERIAL DURING THE APPLICABLE WARRANTY PERIOD.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, MUNTERS DISCLAIMS AND BUYER HEREBY WAIVES, ANY OTHER CLAIM AGAINST MUNTERS (WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE), INCLUDING ANY CLAIM OR LIABILITY FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND RELATING TO OR ARISING OUT OF THE EQUIPMENT OR ANY PART THEREOF, OR THE BUYER'S USE THEREOF.

MUNTERS NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE MANUFACTURE, SALE, DELIVERY, INSTALLATION AND OPERATION OF THE EQUIPMENT OR ANY PART THEREOF EXCEPT AS AFORESAID.

City of Coquitlam RFP 19-01-04  
Appendix B - Technical Drawing





City of Coquitlam  
**REQUEST FOR PROPOSALS**  
**RFP No. 19-01-04**

**DESICCANT DEHUMIDIFIER REPLACEMENT**

Proposals will be received on or before 2:00 pm local time on  
**Thursday February 14, 2019**  
(Closing Date and Time)

**INSTRUCTIONS FOR PROPOSAL SUBMISSION**

Proposal submissions are to be consolidated into one PDF file and uploaded through QFile, the City's file transfer service accessed at website: [qfile.coquitlam.ca/bid](http://qfile.coquitlam.ca/bid)

- 1. In the "Subject Field" enter:** RFP Number and Name
- 2. Add files in .pdf format and "Send"**  
(Ensure your web browser remains open until you receive 2 emails from Qfile to confirm upload is complete.)

Proponents are responsible to allow ample time to complete the Proposal Submission process. If assistance is required phone 604-927-3060 or fax 604-927-3035.

**PROPOSAL SUBMISSION FORM**  
**Complete and return this section and attach Consent of Surety**

**Submitted by:** \_\_\_\_\_  
(Company Name)

Proponents are to provide as much information as possible when replying to each point throughout the Proposal.

Proponents MUST identify any specific requirements with which they are unwilling or unable to comply.

**1. PRICE**

These rates are all inclusive without limitation, including all loading, labour, wages, benefits, equipment, transportation, fuel, mobilization, disposal, overhead and profit.

1.1 Schedule of Values

Line Item	Section of Work	Prices
1.	MOBILIZATION AND DEMOBILIZATION	\$
2.	DEMOLITION, REMOVAL AND DISPOSAL	\$
3.	SUPPLY, DELIVERY AND INSTALLATION INCLUDING ALL ASSOCIATED WORK	\$
4.	COMMISSIONING	\$
	<u>OTHERS NOT LISTED ABOVE:</u>	
5.		\$
6.		\$
7.		\$
	<b>TOTAL PRICE (exclude GST)</b>	<b>\$</b>

**2. FORCE ACCOUNT LABOUR AND EQUIPMENT RATES**

2.1. Contractors Current Own Forces Labour Rates

The Proponent is to provide labour rates in the table below for all labour categories in deliverance of the Services. The labour rates will remain firm for the term of the Contract and will be used by the City for the purpose of evaluating and valuing changes in the Work in the case of lump sum, or in case of force account evaluation.

The labour rates below are all inclusive and include without limitation, wages, taxes and assessments and benefits payable in accordance with applicable laws, mobilization and demobilization, supervision, administration, small tool allowance including small tool rental, overhead and profit.

Line Item	Labour Category	Straight Time/hr (exclude GST)	Overtime Rate/hr (exclude GST)
1.	Project Manager	\$	\$
2.	Site Superintendent	\$	\$
3.	Foreman	\$	\$
4.	Labourer / Helper	\$	\$
5.	Other (not listed above)	\$	\$
6.			



2.2. Equipment Rates

The Proponent is to provide equipment rates for all equipment that will be involved in the Work. The equipment rates will remain firm for the term of the Contract and will be used by the City for the purpose of evaluating and valuing changes in the Work in the case of lump sum, or in case of force account valuation. The rates provided below are all inclusive and include without limitation, operator, fuel, lubrication, service, maintenance, depreciation, mobilization and demobilization, overhead and profit. All tools worth over \$2,000 should be listed. Small tools are considered to be any tool worth \$2,000 or less in new value

The Proponent acknowledges and agrees that if any portion of an hour is spent in performing the Work on a force account basis, a pro-rated portion of the force account rate shall only be charged.

Line Item	Equipment Classification	Hourly Rate (exclude GST)	Specify Make and Model
1.		\$	
2.		\$	
3.		\$	
4.		\$	
5.		\$	

3. **NON-COMPLIANCE**

Fully describe any deviations to the City’s specifications and requirements outlined in this RFP that your company is unable to comply with.

**4. SUPPLIERS**

The Proponent proposes to supply the various products for the Work from the following suppliers:

SUPPLIER	PRODUCT	MANUFACTURER

**NOTE: Alternates to the specified desiccant de-humidifier unit will not be accepted.**

**5. METHODOLOGY, DISPOSAL & QUALITY ASSURANCE**

Summarize the key features of your Proposal and the Technical Approach to be used. Provide a brief description the various components required for successful completion of the work.

**Delivery, set-up and execution of the work** – Proposals should address the plan for the delivery, set up and execution of the work; as well as the disposal, recycle or reuse for the surplus materials. Include any safety and pedestrian control measures.

**Quality Assurance** – Provide the measures the proponent will use to maintain quality control for the Services being performed.

**Risk Factors** – Describe the risk factors anticipated and how the Proponent intends to mitigate these.

<b>Delivery, set-up and execution</b>
<b>Quality Assurance</b>
<b>Risk Factors</b>

**6. KEY PERSONNEL**

The following are the Proponent’s key personnel proposed for use on this project:

Technician Name	Trade Qualifications	Years of experience

**7. WORK SCHEDULE**

Proponents to provide an estimated schedule indicating a commitment to perform the Services (use the spaces provided and/or attach additional pages, if necessary) OR provide your own Gantt schedules as a separate appendix. Activities listed below are sample requirements, please add any additional pertinent items to the submitted schedule:

CONSTRUCTION ACTIVITY																
PRE-CONSTRUCTION MEETING																
MOBILIZATION AND GENERAL REQ'S																
REMOVAL & DISPOSAL OF EXISTING UNIT																
SUPPLY & INSTALLATION OF NEW UNIT																
ROOFING AS REQUIRED																
UTILITY CONNECTIONS AS REQUIRED																
DDC CONNECTIONS																
<b>COMMISSIONING BY MANUFACTURER</b>																
FINAL CLEANUP																
SUBSTANTIAL COMPLETION																
PROJECT CLOSE-OUT / O&M MANUALS																

**8. EXPERIENCE AND REFERENCES**

Proponents shall be competent and capable of performing the services requested and successfully delivered service contracts of similar size, scope and complexity. By submission of a Proposal, Proponents consent the City name contact references to verify successful completion of relevant projects.

<b>Year Started</b>	
<b>Year Completed</b>	
<b>Description of Contract</b>	
<b>Company</b>	
<b>Contact Person</b>	
<b>Telephone and Email</b>	
<b>Contract Value</b>	

<b>Year Started</b>	
<b>Year Completed</b>	
<b>Description of Contract</b>	
<b>Company</b>	
<b>Contact Person</b>	
<b>Telephone and Email</b>	
<b>Contract Value</b>	

<b>Year Started</b>	
<b>Year Completed</b>	
<b>Description of Contract</b>	
<b>Company</b>	
<b>Contact Person</b>	
<b>Telephone and Email</b>	
<b>Contract Value</b>	

**9. SUB-CONTRACTOR**

**9.1. Pre-Qualified Sub-Contractors and Trades**

The City has stated certain aspects of the Services shall be completed by prequalified sub-contractors of the City, as listed below, and will comply with all terms and conditions of the RFP. The Proponent is to request pricing from those vendors on the pre-qualified list for the services listed:

Prequalified Sub-Contractor	Trade	Name and Contact Info
CentiMark Ltd.	Roofing	
Johnson Controls Inc.	Controls	

**9.2. Other Sub-Contractors**

The following Sub-contractors will be utilized in provision of the services not listed in 9.1 – Pre-Qualified Sub-Contractors and Trades, and will comply with all the terms and conditions of this RFP. No changes, additions or deletions are to be made to these subcontractors without the City’s written approval:

Line Item	Trade	Subcontractor’s Legal name and Contact Number	Qualifications/Certifications
a)			
b)			
c)			
d)			

**10. TRAINING AND SAFETY PROGRAM**

Confirm the Proponent has a training and safety program in place that meets the requirements of WorkSafeBC.

**11. CONSENT OF SURETY**

**ATTACH THE CONSENT OF SURETY AND SUBMIT WITH PROPOSAL SUBMISSION FORM**

**A copy of the original Consent of Surety should be submitted with the Proposal submission; that guarantees the City will be provided with a Performance Bond and Labour and Material Payment Bond each in the amount of 50% of the Total Proposal Price.**

**The original document is to be provided upon request by the City.**

**12. VALUE ADDED**

Provide information on what makes your firm innovative, what is your competitive advantage, and what other services your firm provides that would assist or be of benefit to the City:

**13. SUSTAINABLE BENEFITS AND SOCIAL RESPONSIBILITY**

13.1. Sustainable Benefits

Describe all initiatives, policies, programs and product choices that illustrate your firm’s efforts towards sustainable practises and environment responsibility in providing the services that would benefit the City:

13.2. Social Responsibility

a) What policies does your organization have for hiring apprentices, indigenous peoples, recent immigrants, veterans, young people, women, and people with disabilities:

b) What policies does your organization have for the procurement of goods and services from local small and medium sized business or social enterprises:

**14. ADDENDA**

We acknowledge receipt of the following Addenda related to this Request for Proposals and have incorporated the information received in preparing this Proposal:

Addendum No.	Date Issued

**15. AUTHORIZATION**

We hereby submit our Proposal for the supply and services as specified and undertake to carry out the work in accordance with all Regulations and Codes, applicable to this RFP.

We agree to the rules of participation outlined in the [Instructions to Proponents](#) and should our proposal be selected, will accept the City’s contract: [Terms and Conditions of Purchase](#)

The signature is an authorized person of the organization and declares the statements made in their submission are true and accurate.

For the purpose of this RFP submission, electronic signatures will be accepted.

<b>Company Name:</b>	
<b>Address:</b>	
<b>Phone:</b>	
<b>GST Registration No.:</b>	
<b>Project Contact:</b> Name and Title of Individual <i>for communication related to this RFP</i> (please print)	
<b>Contact Email:</b>	
<b>Name &amp; Title of Authorized Signatory:</b> (please print)  <b>Signature:</b>	
<b>Date:</b>	