



**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving  
PWGSC  
33 City Centre Drive  
Suite 480C  
Mississauga  
Ontario  
L5B 2N5  
Bid Fax: (905) 615-2095**

**REQUEST FOR PROPOSAL  
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government  
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services  
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

Address inquiries to the Contracting Authority at:  
Vashti.Ramnarine@pwgsc.gc.ca

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Public Works and Government Services Canada  
Ontario Region  
33 City Centre Drive  
Suite 480  
Mississauga  
Ontario  
L5B 2N5

<b>Title - Sujet</b> Wet Only Precipitation Collectors	
<b>Solicitation No. - N° de l'invitation</b> K3D56-171010/A	<b>Date</b> 2017-01-20
<b>Client Reference No. - N° de référence du client</b> K3D56-171010	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$TOR-201-7261	
<b>File No. - N° de dossier</b> TOR-6-39156 (201)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2017-03-06</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Standard Time EST
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Ramnarine, Vashti	<b>Buyer Id - Id de l'acheteur</b> tor201
<b>Telephone No. - N° de téléphone</b> (905) 615-2419 ( )	<b>FAX No. - N° de FAX</b> (905) 615-2060
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF THE ENVIRONMENT 4905 Dufferin Street Toronto Ontario M3H5T4 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b> See Herein	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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## **PART 1 - GENERAL INFORMATION**

### **1.1. Requirement**

The requirement is detailed under Article 2. Requirement of the resulting contract clauses.

### **1.2. Debriefings**

Bidders may request a debriefing on the results from the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### **1.3. Trade Agreements**

"The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), and the Agreement on Internal Trade (AIT)."

## **PART 2 - BIDDER INSTRUCTIONS**

### **2.1 Standard Instructions, Clauses and Conditions**

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) ([2016-04-04](#)) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 Days  
Insert: 90 Days

### **2.2. Submission of Bids**

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

### **2.3. Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

## **2.4. Applicable Laws**

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders

## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **3.1. Bid Preparation Instructions**

Canada requests that bidders provide their bid in separately bound sections as follows:

- Section I:        Technical Bid (2 hard copies)
- Section II:       Financial Bid (1 hard copy)
- Section III:      Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a)    use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b)    use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1)    use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2)    use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

## **Section I: Technical Bid**

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

## **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with Annex B, Basis of Payment. The total amount of Goods and Services Tax (GST) or Harmonized Sales Tax (HST) must be shown separately, if applicable.

### **3.1.1 Electronic Payment of Invoices – Bid**

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex C Electronic Payment Instruments, to identify which ones are accepted.

If Annex C Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

### **3.1.2 Exchange Rate Fluctuation**

C3011T (2013-11-06) Exchange Rate Fluctuation

## **Section III: Certifications**

Bidders must submit the certifications and additional information required under Part 5.

## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **4.1. Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### **4.1.1 Technical Evaluation**

##### **4.1.1.1. Mandatory Technical Criteria**

- (a) The collector must be supplied based on ECCC specifications and accommodate Environment Canada's current sample collection bucket as well as utilize the same sensors for detecting precipitation events. The collection bucket and sensor specifications and additional requirements are described in further detail as APPENDIXES TO ANNEX A.

#### **4.1.2 Financial Evaluation**

##### **4.1.2.1 Mandatory Financial Criteria.**

The Bidder must complete and submit Annex B - Basis of Payment, in Canadian Funds.

##### **4.1.2.2 Evaluation of Price**

- a. The price of the bid will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination, Canadian customs duties and excise taxes included.

b. The Evaluated Price will be the sum of the Bidders Firm Lot Price(s) for the Firm Requirement, plus the sum of the Bidders Firm Lot Price(s) for the Optional Requirement as provided in Annex B.

#### **4.2. Basis of Selection - Mandatory Technical Criteria**

**4.2.1** A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

### **PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

#### **5.1 Certifications Required with the Bid**

Bidders must submit the following duly completed certifications as part of their bid.

##### **5.1.1 Integrity Provisions - Declaration of Convicted Offences**

In accordance with the *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

#### **5.2 Certifications Precedent to Contract Award and Additional Information**

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

##### **5.2.1 Integrity Provisions – Required Documentation**

In accordance with the *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

##### **5.2.2 Federal Contractors Program for Employment Equity - Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the Employment and Social Development Canada (ESDC) - Labour's website ([http://www.esdc.gc.ca/en/jobs/workplace/human\\_rights/employment\\_equity/federal\\_contractor\\_program.page?&\\_ga=1.229006812.1158694905.1413548969](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969)).

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Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.

## PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 6.1. Security Requirement

There is no security requirement applicable to this contract.

### 6.2. Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex A.

### 6.3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### 6.3.1 General Conditions

2010 A (2016-04-04), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

### 6.4 Term of Contract

#### 6.4.1 Period of the Contract

The period of the Contract is from date of Contract to 31 March 2017 inclusive.

#### 6.4.2 Delivery Date

All the deliverables must be received on or before 31 March 2017.

#### 6.4.3 Option to Extend the Contract

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to 3 additional 1 year period(s) under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least 10 calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

### 6.5. Authorities

#### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:  
Vashti Ramnarine  
Supply Officer  
Public Works and Government Services Canada  
Acquisitions Branch



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33 City Centre Dr., Ste. 480  
Mississauga, ON, L5B 2N5  
Telephone: (905) 615-2419  
Facsimile: (905) 615-2060  
E-mail address: vashti.ramnarine@pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

### 6.5.2 Project Authority

The Project Authority for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### 6.5.3 Contractor's Representative

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

## 6.6. Payment

### 6.6.1 Basis of Payment - Firm Lot Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm lot prices, as specified in Annex B, Basis of Payment for a total cost of \$ \_\_\_\_\_. Customs duties are included, and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

### 6.6.2 Limitation of Price

SACC Manual [clause C6000C](#) (2011-05-16) limitation of price

### 6.6.3 Single Payment

SACC Manual [clause H1000C](#) (2008-05-12) Single Payment

### 6.7. Invoicing Instructions

- A. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
- B. Invoices must be distributed as follows:
- (i) The original and one (1) copy must be forwarded to the addresses as shown on page 1 of the contract for certification and payment.
  - (ii) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

### 6.8. Certifications

#### 6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

### 6.9. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in \_\_\_\_\_.

### 6.10. Priority of Documents

If there is a discrepancy between the wordings of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) [the general conditions 2010A](#) (2016-04-04), General Conditions - Goods (Medium Complexity);
- (c) Annex A - Requirement;
- (d) Annex B - Basis of Payment;
- (e) the Contractor's bid dated \_\_\_\_\_.

### 6.11. Insurance Requirements

SACC Manual clause [G1005C](#) (2016-01-28), Insurance

## **ANNEX "A"**

### **REQUIREMENT**

#### **Title: Wet-only Precipitation Collectors**

The supply and delivery of six (6) wet-only precipitation collectors for Environment and Climate Change Canada, 4905 Dufferin Street, Downsview, ON.

#### **Background**

Environment and Climate Change Canada's (ECCC) Canadian Air and Precipitation Monitoring Network (CAPMoN) has been collecting precipitation samples for analysis for over 30 years. CAPMoN is currently collecting precipitation samples at 34 sites across Canada and is seeking to replace its aging equipment and instrumentation. The required wet-only precipitation collectors will replace the current ECCC model C300.

The collector must be supplied based on ECCC specifications and accommodate the current sample collection bucket as well as utilize the same sensors for detecting precipitation events. The collection bucket and sensor specifications and additional requirements are described in further detail as APPENDIXES TO ANNEX A.

The collectors must be delivered on or before March 31, 2017.

The wet-only Precipitation Collectors must meet the following mandatory specifications:

	<b>MANDATORY CRITERIA</b>
M1	Collector must be demonstrated to have been operational in an atmospheric, environmental or an acceptable equivalent monitoring network within the last 5 years. Bidder must provide references from the monitoring network.
M2	Collector must use CAPMoN's existing sample collection bucket for precipitation sample collection (1/4 inch thick polyethylene with an outer diameter of 13 inches and a bucket height of 20±0.12 inches. (Refer to Appendix II to Annex A - CAPMoN Sample Collection Bucket Dimensions).
M3	Collector must use 3 of CAPMoN's existing precipitation sensor (a 6 pin sensor composed of heating wire, a thermistor, and contact sensor grid). Refer to the specifications as per Appendix III to Annex A - CAPMoN Sensor Grid).
M4	Collector must use a replaceable gasket with specifications comparable to the one described in Appendix IV to Annex A – Specification for the Fabrication and Packaging of the CAPMoN Disposable Lid Cover Gasket, Gasket must be included with collector.
M5	Collector must be a wet only sampler.
M6	Collector must be weather resistant in all climates across Canada and have an operating temperature range of -40°C to 40°C.
M7	Collector must be suitable for one person to carry and include handle(s). Collector cannot be heavier than 20 kilograms (Sample collection bucket not included).

M8	The overall exterior dimensions of the collector body only (hood and components that can be easily removed are not included) must not exceed 28" x 17" x 13" (L x W x D).
M9	Collector must be able to be mounted and secured on a 3" schedule 80 pipe (3.5" outer diameter).
M10	The sample collection bucket support on the collector must be vented or of an open design to prevent buildup of ice and snow.
M11	Hood must be completely opened and in the rest position within 15 seconds of activation of sensors.
M12	Hood in open rest position must be a minimum 20" (edge to edge) away and not higher than collection bucket opening.
M13	Hood must have a delay of between 110 and 130 seconds before closing at the end of a precipitation event.
M14	Hood surface must be Teflon coated (in black or white) to prevent buildup of ice, snow and dirt.
M15	Hood must be in the upright position at all times.
M16	Hood must have a peaked roof to prevent buildup of debris, ice, and snow. Dimensions must be large enough to completely cover the sample collection bucket when no precipitation is occurring.
M17	The collector hood must be removable for ease of shipping.
M18	Sensor arm on proposed collector must be collapsible for ease of shipping.
M19	Sensor grids must be situated at a height not more than 2" higher or 2" lower than the collection bucket opening.
M20	Sensor grids must be a minimum of 20" away (edge to edge) from the collection bucket opening.
M21	Collector components including cables must have a modular design.
M22	Collector must have a manual hood open/close operation feature.
M23	Collector must use a linear electric actuator for hood movement. Warner model S-Track or equivalent.
M24	Collector must have user definable and adjustable operating parameters. At a minimum the following parameters must be included but not limited to: Site name using minimum 3 alphanumeric characters, date and time, hood closure delay after a precipitation event, and sensor wet/dry threshold (sensor referenced to 221K Ohm of resistance for activation).
M25	Data logging interval must be user selectable and include at a minimum 1, 2, 5, 10, 15, and 60 minute intervals as options. Data timestamp must be recorded to the nearest rounded interval.
M26	Collector must allow user to select input power of 120VAC 60Hz or 24VDC.

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M27	Collector firmware and settings must be capable of updating using an external flash device.
M28	Collector must have remote access/control capabilities (e.g. RS-232, Ethernet, etc.).
M29	Collector must have data logging and internal data storage system for recording all available instrument parameters for a minimum of 14 days. At a minimum the following data types must be included but not limited to: Bucket on/off, precipitation weight, hood activations, ambient and internal temperatures, sensor wet/dry status, and instrument faults.
M30	Collector must have 0 to 5 volts analog outputs to indicate hood position and precipitation sensor wetness.
M31	Collector must have internal diagnostics for instrument trouble shooting and data validation.
M32	Collector must have externally mounted operational and status LED indicators.
M33	Product support, repair, service, and parts available for a minimum of 5 years after delivery.
M34	Collector must have Electrical Safety Authority (ESA) certification or equivalent.

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## ANNEX B

### BASIS OF PAYMENT

Firm all inclusive lot price for the supply and delivery of (6) Precipitation Collectors in accordance with Annex A. Prices are in **Canadian Funds**, FOB destination including all delivery charges, Canadian customs duties and excise taxes included as applicable. Goods and Services Tax/Harmonized Sales Tax Excluded.

#### 1.0 FIRM: The collectors must be delivered on or before March 31, 2017.

#	Description	QTY	Firm Unit Price	Extended Price
1	For the supply and delivery of <u>(6) Precipitation Collectors</u> In accordance with the specification detailed in Annex A.  Manufacturer: _____  Make and Model: _____  Literature attached: Yes (____) No (____)	6	\$ _____	\$ _____
2	Delivery Charges	1 lot	\$ _____	\$ _____
3	Sub - Total		\$ _____	\$ _____
4	GST / HST Extra (as applicable):		\$ _____	\$ _____
5	Total:			\$ _____

TOTAL FOR FIRM YEAR: \$ \_\_\_\_\_

#### 2.0 Optional Requirement:

#	Description	QTY	Firm Unit Price
1	<b>Option 1: April 1, 2017 – March 31, 2018</b> For the supply and delivery of up to <u>(10) Precipitation Collectors</u> in accordance with the specification detailed in Annex A.	10	\$ _____
2	<b>Option 2: April 1, 2018 – March 31, 2019</b> For the supply and delivery of up to <u>(10) Precipitation Collectors</u> in accordance with the specification detailed in Annex A.	10	\$ _____
3	<b>Option 2: April 1, 2019 – March 31, 2020</b> For the supply and delivery of up to <u>(12) Precipitation Collectors</u> in accordance with the specification detailed in Annex A	12	\$ _____

TOTAL FOR OPTION YEAR: 1, 2 & 3 \$ \_\_\_\_\_

Solicitation No. - N° de l'invitation  
K3D56-171010/A  
Client Ref. No. - N° de réf. du client  
K3D56-171010

Amd. No. - N° de la modif.  
File No. - N° du dossier  
TOR-6-39156

Buyer ID - Id de l'acheteur  
TOR201  
CCC No./N° CCC - FMS No./N° VME

## **ANNEX “C” to PART 3 OF THE BID SOLICITATION**

### **ELECTRONIC PAYMENT INSTRUMENTS**

The Bidder accepts any of the following Electronic Payment Instrument(s):

- ☐ VISA Acquisition Card;
- ☐ MasterCard Acquisition Card;
- ☐ Direct Deposit (Domestic and International);
- ☐ Electronic Data Interchange (EDI);
- ☐ Wire Transfer (International Only);
- ☐ Large Value Transfer System (LVTS) (Over \$25M)

## APPENDIX I to ANNEX "A"

### MANDATORY TECHNICAL EVALUATION CRITERIA

To demonstrate compliance, Bidders must also include and appropriately cross reference published technical information that confirms compliance with each mandatory criterion specified herein. Failure to comply with any of the mandatory technical requirements will disqualify the bid from further consideration.

To ensure compliance is clear, the bidder must utilize a numbering system that corresponds to the numbering system below. An example of an acceptable system would be to indicate the specific reference number on a Tab stuck to the appropriate page of the technical documentation and then highlight or underline the appropriate article of the technical documentation that demonstrates compliance.

It is the Bidders responsibility to ensure the submitted technical documentation provides adequate detail to prove that the proposed product(s) meet the requirements of the performance specification. Canada will not evaluate information such as references to website addresses where additional information can be found. If specific published technical documentation is not available, the Bidder must prepare a written narrative complete with a detailed explanation of how its bid demonstrates technical compliance.

Bids which do not meet all of the Mandatory Criteria listed below will be deemed non-compliant and given no further consideration. All literature, specification, documentation must be submitted with the bid at bid closing.

### MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS

ITEM	MANDATORY CRITERIA	PROPOSAL PAGE #
M1	Collector must be demonstrated to have been operational in an atmospheric, environmental or an acceptable equivalent monitoring network within the last 5 years. Bidder must provide references from the monitoring network.	
M2	Collector must use CAPMoN's existing sample collection bucket for precipitation sample collection (1/4 inch thick polyethylene with an outer diameter of 13 inches and a bucket height of 20±0.12 inches. (Refer to Appendix II to Annex A - CAPMoN Sample Collection Bucket Dimensions).	
M3	Collector must use 3 of CAPMoN's existing precipitation sensor (a 6 pin sensor composed of heating wire, a thermistor, and contact sensor grid). Refer to the specifications as per Appendix III to Annex A - CAPMoN Sensor Grid).	
M4	Collector must use a replaceable gasket with specifications comparable to the one described in Appendix IV to Annex A – Specification for the Fabrication and Packaging of the CAPMoN Disposable Lid Cover Gasket, Gasket must be included with collector.	
M5	Collector must be a wet only sampler.	
M6	Collector must be weather resistant in all climates across Canada and have an operating temperature range of -40°C to 40°C.	
M7	Collector must be suitable for one person to carry and include handle(s). Collector cannot be heavier than 20 kilograms (Sample collection bucket not included).	



M8	The overall exterior dimensions of the collector body only (hood and components that can be easily removed are not included) must not exceed 28" x 17" x 13" (L x W x D).	
M9	Collector must be able to be mounted and secured on a 3" schedule 80 pipe (3.5" outer diameter).	
M10	The sample collection bucket support on the collector must be vented or of an open design to prevent buildup of ice and snow.	
M11	Hood must be completely opened and in the rest position within 15 seconds of activation of sensors.	
M12	Hood in open rest position must be a minimum 20" (edge to edge) away and not higher than collection bucket opening.	
M13	Hood must have a delay of between 110 and 130 seconds before closing at the end of a precipitation event.	
M14	Hood surface must be Teflon coated (in black or white) to prevent buildup of ice, snow and dirt.	
M15	Hood must be in the upright position at all times.	
M16	Hood must have a peaked roof to prevent buildup of debris, ice, and snow. Dimensions must be large enough to completely cover the sample collection bucket when no precipitation is occurring.	
M17	The collector hood must be removable for ease of shipping.	
M18	Sensor arm on proposed collector must be collapsible for ease of shipping.	
M19	Sensor grids must be situated at a height not more than 2" higher or 2" lower than the collection bucket opening.	
M20	Sensor grids must be a minimum of 20" away (edge to edge) from the collection bucket opening.	
M21	Collector components including cables must have a modular design.	
M22	Collector must have a manual hood open/close operation feature.	
M23	Collector must use a linear electric actuator for hood movement. Warner model S-Track or equivalent.	
M24	Collector must have user definable and adjustable operating parameters. At a minimum the following parameters must be included but not limited to: Site name using minimum 3 alphanumeric characters, date and time, hood closure	

	delay after a precipitation event, and sensor wet/dry threshold (sensor referenced to 221K Ohm of resistance for activation).	
M25	Data logging interval must be user selectable and include at a minimum 1, 2, 5, 10, 15, and 60 minute intervals as options. Data timestamp must be recorded to the nearest rounded interval.	
M26	Collector must allow user to select input power of 120VAC 60Hz or 24VDC.	
M27	Collector firmware and settings must be capable of updating using an external flash device.	
M28	Collector must have remote access/control capabilities (e.g. RS-232, Ethernet, etc.).	
M29	Collector must have data logging and internal data storage system for recording all available instrument parameters for a minimum of 14 days. At a minimum the following data types must be included but not limited to: Bucket on/off, precipitation weight, hood activations, ambient and internal temperatures, sensor wet/dry status, and instrument faults.	
M30	Collector must have 0 to 5 volts analog outputs to indicate hood position and precipitation sensor wetness.	
M31	Collector must have internal diagnostics for instrument trouble shooting and data validation.	
M32	Collector must have externally mounted operational and status LED indicators.	
M33	Product support, repair, service, and parts available for a minimum of 5 years after delivery.	
M34	Collector must have Electrical Safety Authority (ESA) certification or equivalent.	

The collector must be supplied based on ECCC specifications and accommodate Environment Canada's current sample collection bucket as well as utilize the same sensors for detecting precipitation events. The collection bucket and sensor specifications and additional requirements are described in further detail as APPENDIXES TO ANNEX A.

All inquiries to this Request for Proposal must be directed to the Contracting Authority

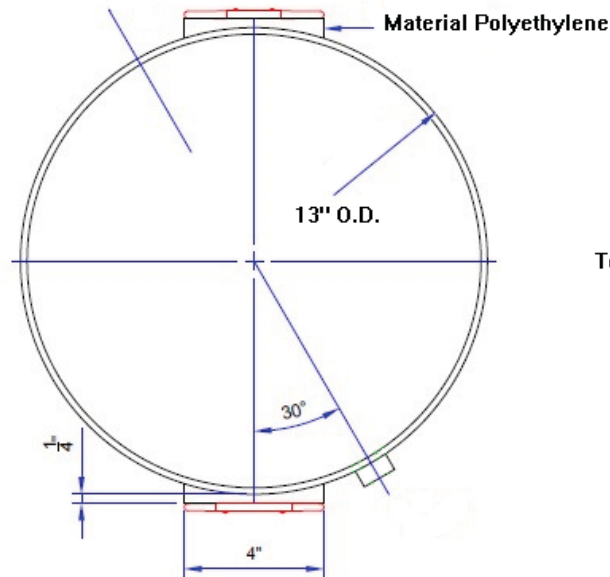
## APPENDIX II TO ANNEX "A"

### CAPMoN SAMPLE COLLECTION BUCKET DIMENSIONS

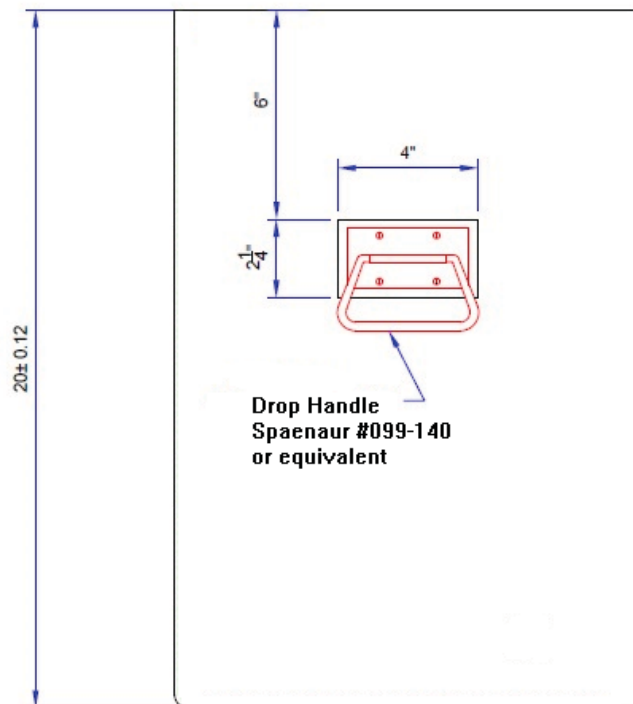


Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada

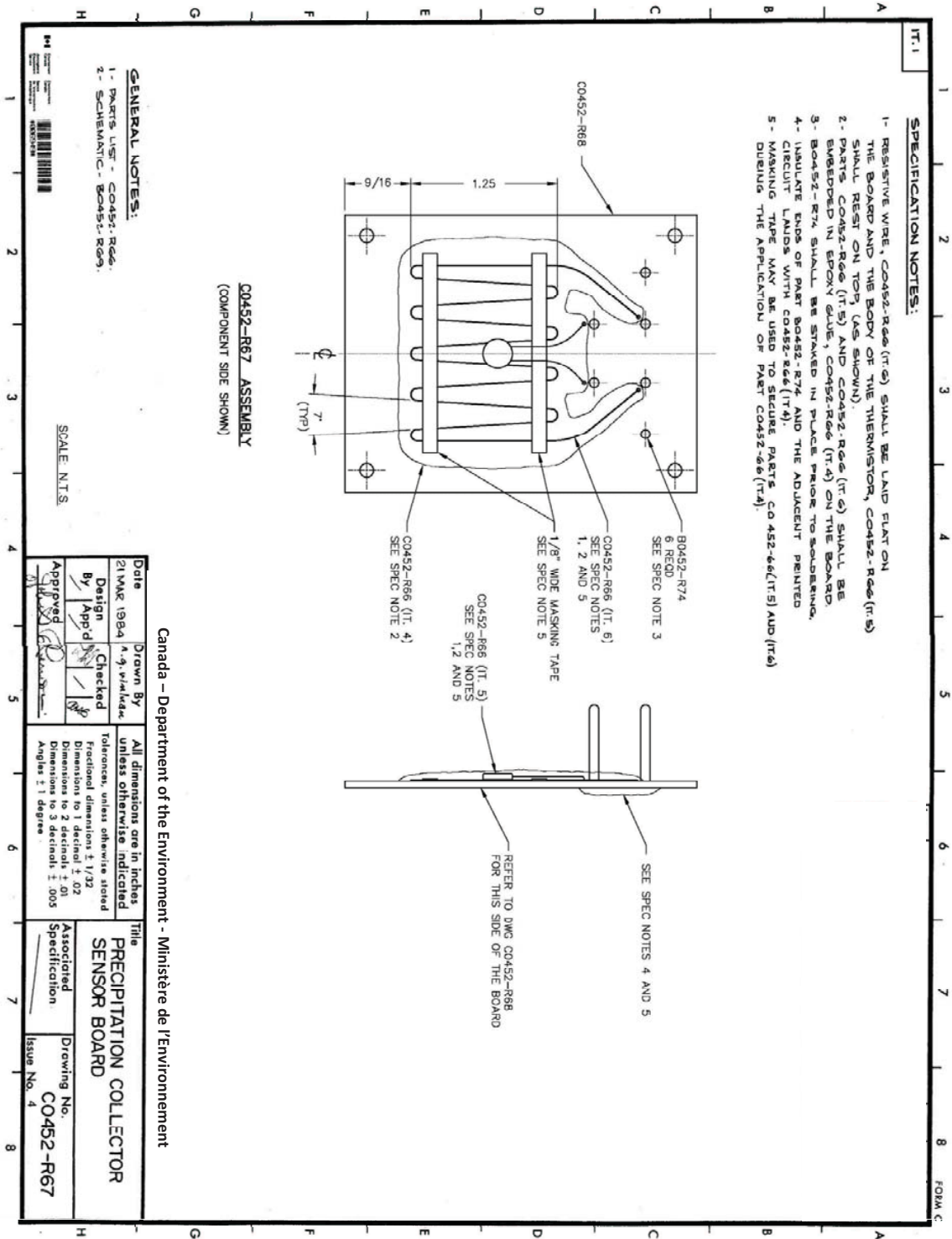


Top View



Side View

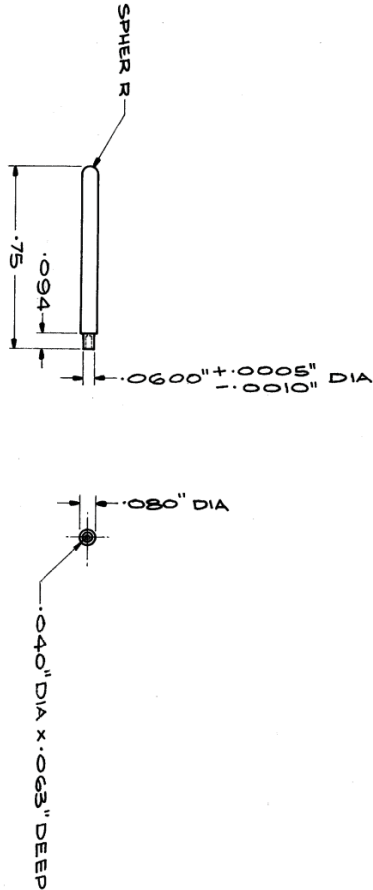
# APPENDIX III TO ANNEX "A" CAPMoN SENSOR GRID DRAWINGS





17.3

FORM B



**BO452-R74 PIN**

MATL - YELLOW BRASS.  
FIN. - TIN/LEAD PLATING .0003" THICK.  
QTY - 6 PER UNIT.



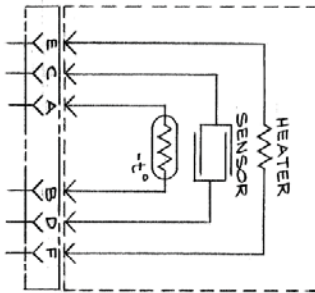
Canada - Department of the Environment - Ministère de l'Environnement

**GENERAL NOTES:**

- 1- PARTS LIST - CO452-R66.
- 2- ASSEMBLY - CO452-R67.
- 3- SCHEMATIC - BO452-R68.

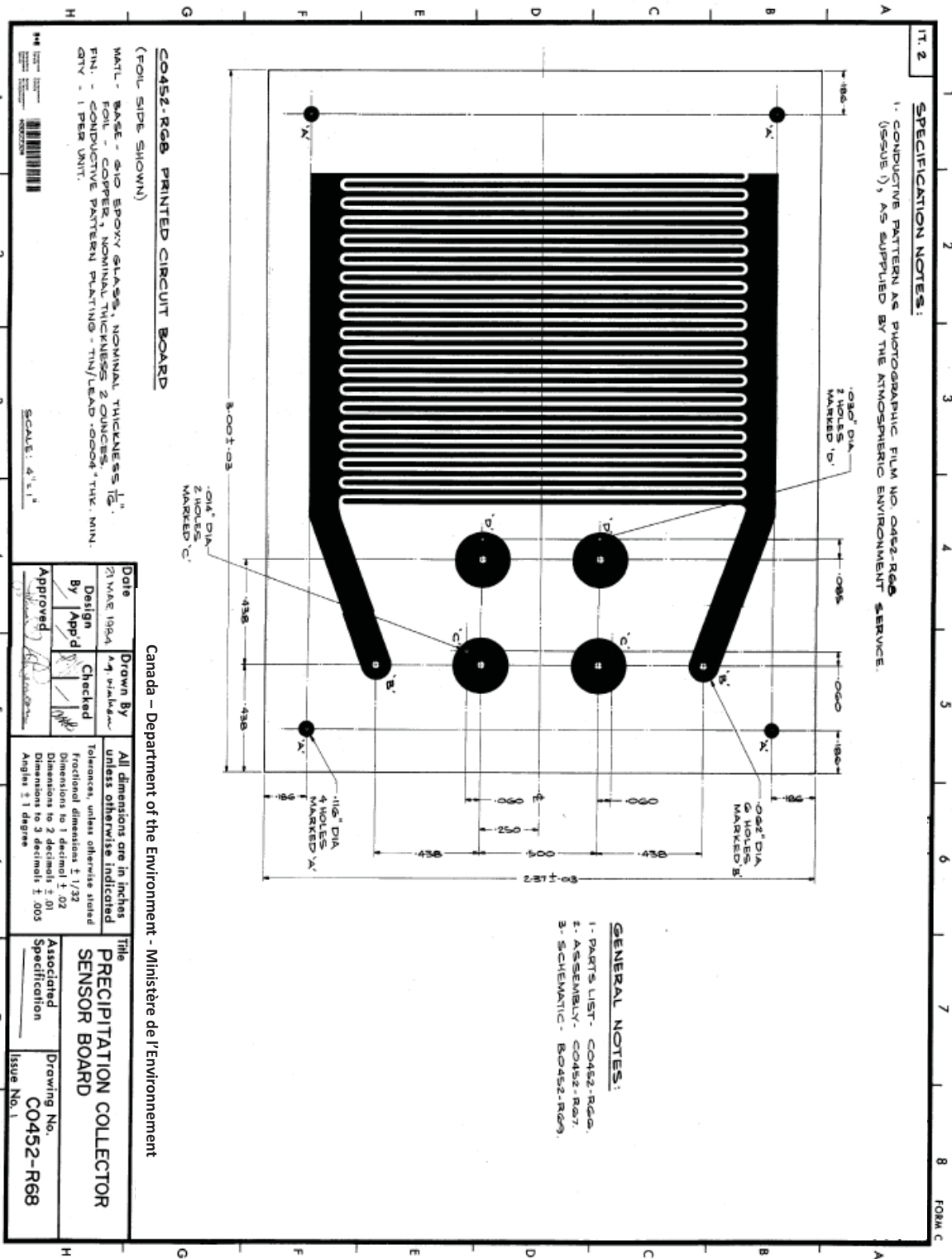
SCALE: 2" = 1"

Date 21 MAR 1984	Drawn By A. J. W. / maw	Title <b>PRECIPITATION COLLECTOR SENSOR BOARD</b>	
Design By	App'd	Checked	Associated Specification
Approved			Drawing No. <b>BO452-R74</b>
All dimensions are in inches unless otherwise indicated		Issue No. 3	
Tolerances, unless otherwise stated Fractional dimensions $\pm 1/32$ Dimensions to 1 decimal $\pm .02$ Dimensions to 2 decimals $\pm .01$ Dimensions to 3 decimals $\pm .005$ Angles $\pm 1$ degree			



Canada - Department of the Environment - Ministère de l'Environnement

<b>GENERAL NOTES:</b> 1- PARTS LIST - C0452-R66. 2- ASSEMBLY - C0452-R67.		<b>Date</b> 21 MAR 1984		<b>Drawn By</b> n.g. v. m. l. n. g.		All dimensions are in inches Unless otherwise indicated Tolerances, unless otherwise stated Fractional dimensions $\pm 1/32$ Dimensions to 1 decimal $\pm .02$ Dimensions to 2 decimals $\pm .01$ Angles $\pm 1$ degree	<b>Title</b> PRECIPITATION COLLECTOR SENSOR BOARD	
<b>Design</b> By <i>[Signature]</i>		<b>App'd</b> <i>[Signature]</i>		<b>Checked</b> <i>[Signature]</i>			<b>Associated Specification</b> B0452-R69	
<b>Approved</b> <i>[Signature]</i>		<b>Issue No. 1</b>		<b>Drawing No.</b> B0452-R69				





## APPENDIX IV TO ANNEX "A"

### SPECIFICATIONS FOR THE FABRICATION AND PACKAGING OF THE CAPMoN DISPOSABLE LID COVER GASKET

1. A support plate (14-1/4" X 14-1/4") ( $\pm 1/8$ ") 20 gauge utility grade aluminium sheet with corners rounded (1/2" radius) and edges broken must be fabricated.
2. A (14-5/8" X 14-5/8" X 1/2") thick piece of upholstery grade white polyurethane foam must be centred and glued onto the aluminium sheet using a quick drying adhesive specific for polyurethane foam (e.g. foam adhesive #478).
3. The foam aluminium gasket must then be covered by a plastic laminate film made of one 2 mil Dupont Sclair® film laminated to one 2 mil Dupont Dartek® (or a film of comparable quality). The Nylon (Dartek®) side of the film must face the polyurethane foam.
4. The plastic laminate film must be taped to the aluminium sheet using MACtac® 3" wide weather proof foil tape (or equivalent foil tape). The plastic laminate film must be alternately folded over the back of the gasket and taped, with two opposite sides being folded over so that approximately 2 to 2-1/2" of the film should overlap the edge of the gasket and can be taped. This folding technique is used to prevent the migration of water or air into the foam part of the gasket.
5. The front of the gasket (foam side) must be cleaned under laboratory conditions, using Kimwipes™ and reagent grade methanol. The surface of the gasket must then be wiped with a new Kimwipe™ and deionized water and then wiped dry with a new Kimwipe™.
6. Immediately following procedure #5 (to avoid the chance of contamination) the gaskets must be put into new 1-2 mil high grade polyethylene film bags (approximate bag size 16" X 16"), a clean new Kimwipe™ must be placed in the bag along with each gasket, air should be evacuated from the bags and the tops sealed. Plastic disposable gloves must be worn during this procedure and the gasket handled by the edge or back side only.
7. The gasket must be packaged with 7 gaskets sealed into a high grade polyethylene bag large enough to contain seven gaskets the end of which must be folded over and taped closed. The 7 gaskets enclosed in the bag must then be wrapped in heavy brown shipping paper and taped closed.
8. A label must be affixed to the bag or back of each gasket and include the following information:

CAPMoN Disposable Lid Cover Gasket  
Manufacturer's Name  
Date of Manufacture