

MSRB Notice 2009-14 (April 22, 2009)

MSRB Files EMMA Continuing Disclosure Subscription Service and Publishes Preliminary Specifications for Subscription and Document Submission Feeds

The Municipal Securities Rulemaking Board (the "MSRB") has filed with the Securities and Exchange Commission ("SEC") a proposed rule change to establish a real-time subscription to the document collection of the continuing disclosure service of the MSRB's Electronic Municipal Market Access system ("EMMA"). The EMMA continuing disclosure service will become operational on July 1, 2009. The MSRB has requested approval of the proposed rule change on or prior to July 1, 2009 to allow the MSRB to launch the continuing disclosure subscription upon commencement of operations of the continuing disclosure service.

The MSRB also is publishing preliminary specifications in connection with computer-to-computer processes for the large-scale submission of continuing disclosure documents to EMMA and for receiving the continuing disclosure subscription, as follows:

• <u>Automated Submission Interface</u> – a computer-to-computer connection for submission of continuing disclosure documents, together with related information, to EMMA by issuers, obligated persons and their agents³

File No. SR-MSRB-2009-05. Comments on the proposed rule change should be submitted to the SEC and should reference this file number.

See MSRB Notice 2008-47 (December 8, 2008) and Securities Exchange Act Release No. 59061 (December 5, 2008), 73 FR 75778 (December 12, 2008) (File No. SR-MSRB-2008-05) (approving the continuing disclosure service of EMMA with an effective date of July 1, 2009) (together, the "EMMA Continuing Disclosure Service Approval"). The EMMA continuing disclosure service is designed to commence operation simultaneously with the effectiveness of certain amendments to Exchange Act Rule 15c2-12 adopted by the SEC. See Securities Exchange Act Release No. 59062 (December 5, 2008), 73 FR 76104 (December 15, 2008) (adopting amendments to Exchange Act Rule 15c2-12) (the "Rule 15c2-12 Amendment Approval").

Continuing disclosure documents and related information could also be submitted to EMMA through an Internet-based data entry and document upload interface, as described below.

• <u>Continuing Disclosure Subscription</u> – a computer-to-computer connection for real-time dissemination to subscribers of continuing disclosure documents and related information posted on EMMA's public website (the "EMMA web portal")

These preliminary specifications are subject to change and the MSRB expects to publish final specifications in advance of the launch of the continuing disclosure service.

OVERVIEW OF EMMA'S CONTINUING DISCLOSURE SERVICE

The EMMA continuing disclosure service will receive electronic submissions of, and will make publicly available on the Internet through the EMMA web portal, ⁴ continuing disclosure documents and related information from issuers, obligated persons and their agents. As approved, the EMMA continuing disclosure service will accept submissions of (i) continuing disclosure documents as described in Exchange Act Rule 15c2-12, and (ii) other disclosure documents specified in continuing disclosure undertakings but not specifically described in Rule 15c2-12.⁵ In addition, the MSRB has filed with the SEC a proposal to expand the continuing disclosure service to accept and make publicly available voluntary electronic submissions of continuing disclosure documents not set forth in Rule 15c2-12 (the "Voluntary Disclosure Proposal").⁶ The MSRB is seeking approval of the Voluntary Disclosure Proposal on or prior to July 1, 2009 so as to allow EMMA's continuing disclosure service to accept such voluntary disclosures upon commencement of operations. These preliminary specifications provide an indication of those items that remain subject to approval of the Voluntary Disclosure Proposal.

OVERVIEW OF CONTINUING DISCLOSURE PROVISIONS OF RULE 15c2-12

Under Rule 15c2-12, an underwriter for a primary offering of municipal securities subject to the rule is prohibited from underwriting the offering unless the underwriter has determined that the issuer or an obligated person for whom financial information or operating data is presented in the final official statement has undertaken in writing to provide certain items of information to the marketplace. The rule provides that such items include: (A) annual financial information concerning obligated persons; (B) audited financial statements for obligated persons if available and if not included in the annual financial information; (C) notices of certain specified events, if material; and (D) notices of failures to provide annual financial information on or before the date specified in the written undertaking.⁷

The EMMA web portal is accessible at http://emma.msrb.org.

See the EMMA Continuing Disclosure Service Approval, *supra* note 1, for a detailed description of the EMMA continuing disclosure service.

⁶ See MSRB Notice 2009-12 (April 14, 2009).

⁷ See the Rule 15c2-12 Amendment Approval, supra note 1, for a detailed description of the provisions of Rule 15c2-12, as amended as of July 1, 2009.

SUBMISSION PROCESS OVERVIEW

Method of Submission

All continuing disclosure documents would be submitted to the MSRB, free of charge, through either EMMA's automated computer-to-computer submission interface or EMMA's web form submission interface for manual submissions.

Automated submission interface. The automated submission interface is designed for submitters that consistently expect to make multiple submissions each day, such as agents that may handle submissions on behalf of a number of issuers and/or obligors. The MSRB will expose a web service interface allowing for the submission of SOAP (Simple Object Access Protocol) standard XML (extensible markup language) messages and PDF (portable document format) documents using secure, computer-to-computer communications. This interface will be remotely consumed by applications written by or for submitters in a wide variety of programming languages and running on a wide variety of platforms. Submitters using the automated submission interface will connect to the web service interface as follows:

For continuing disclosure submissions: https://services.emma.msrb.org/DisclosureServices/ContinuingDisclosureService.svc

Note that this connection is not currently operational and the MSRB will provide notice when it becomes available.

Beta version of automated submission interface. Simultaneously with the publication of this notice, the MSRB is making available a beta version of the automated submission interface, which will serve as a platform for potential submitters to the automated submission interface to conduct tests to ensure proper programming and configuration of their applications for making submissions to the EMMA continuing disclosure service. Test submissions made through the beta platform will not be published on the EMMA web portal and will not be disseminated through the continuing disclosure subscription service.

The web service interface for the beta automated submission interface is as follows:

For beta platform of the continuing disclosure submissions: https://servicesbeta.emma.msrb.org/DisclosureServices/ContinuingDisclosureService.svc

The beta platform does not reflect voluntary disclosures, together with certain related data elements, that remain subject to approval of the Voluntary Disclosure Proposal.⁸ Items

_

⁸ See footnote 6 supra and accompanying text.

described in these preliminary specifications that are not reflected in the beta platform are noted below.

<u>Web form submission interface</u>. The web form submission interface will allow for Internet-based data entry and PDF document upload on the EMMA web portal. The web form submission interface will be accessible through the EMMA web portal. Further information regarding the web form submission interface will be published by the MSRB in the future.

Document Types

For submission purposes, EMMA's continuing disclosure service will allow submitters to select from a number of categories of continuing disclosure documents for purposes of indexing submissions. These categories will be divided between two types: Financial/Operating Data Disclosures and Event-Based Disclosures.

<u>Financial/Operating Data Disclosures</u>. The following categories will be available under this type of submission:

15c2-12 Based Continuing Disclosures

- annual financial information concerning obligated persons
- audited financial statements for obligated persons if available and if not included in the annual financial information
- notice of failure to provide annual financial information on or before the date specified in the continuing disclosure undertaking

Additional/Voluntary Continuing Disclosures¹⁰

- quarterly/monthly financial information
- change in fiscal year/timing of annual disclosure
- change in accounting standard
- interim/additional financial information/operating data
- budget

The web form submission interface will be accessible through the EMMA web portal at http://emma.msrb.org/Submission/SubmissionPortal.aspx.

These additional/voluntary continuing disclosure categories are subject to approval of the Voluntary Disclosure Proposal and generally are not reflected in the beta platform.

- investment/debt/financial policy
- material provided to rating agency or credit/liquidity provider
- consultant reports
- other financial/operating data

Event-Based Disclosures. The following categories will be available under this type of submission:

15c2-12 Based Continuing Disclosures (Material Event Notices)

- principal and interest payment delinquencies
- non-payment related defaults
- unscheduled draws on debt service reserves reflecting financial difficulties
- unscheduled draws on credit enhancements reflecting financial difficulties
- substitution of credit or liquidity providers or their failure to perform
- adverse tax opinions or events affecting the tax-exempt status of the security
- modifications to rights of security holders
- bond calls
- defeasances
- release, substitution or sale of property securing repayment of the securities
- rating changes

Additional/Voluntary Continuing Disclosures¹¹

- amendment to continuing disclosure undertaking
- change in obligated person

These additional/voluntary continuing disclosure categories are subject to approval of the Voluntary Disclosure Proposal and generally are not reflected in the beta platform.

- notice to investors pursuant to bond documents
- communication from the Internal Revenue Service
- tender offer/secondary market purchases
- bid for auction rate or other securities¹²
- capital or other financing plan
- litigation/enforcement action
- merger/consolidation/reorganization/insolvency/bankruptcy
- change of trustee, tender agent, remarketing agent, or other on-going party
- derivative or other similar transaction
- other event-based disclosures

Document Format

Continuing disclosure documents will be accepted solely as PDF files configured to permit documents to be saved, viewed, printed and retransmitted by electronic means. If the submitted file is a reproduction of the original document, the submitted file must maintain the graphical and textual integrity of the original document. Beginning on January 1, 2010, the MSRB will require that such PDF files be word-searchable (that is, allowing the user to search for specific terms used within the document through a search or find function available in most standard software packages), provided that diagrams, images and other non-textual elements would not be required to be word-searchable.¹³

This would include, but not be limited to, any notice pursuant to the SEC no-action letter regarding municipal auction rate securities dated March 14, 2008, *available at* http://www.sec.gov/divisions/corpfin/cf-noaction/2008/mars031408.pdf.

The MSRB strongly encourages submitters to immediately begin making submissions as word-searchable PDF files (preferably as native PDF or PDF normal files, which generally produce smaller and more easily downloadable files as compared to scanned PDF files).

Submission Accounts and MSRB Gateway

All submissions would be made through password protected accounts established through the MSRB's Gateway. MSRB Gateway will be accessible through the MSRB's website at www.msrb.org or through the EMMA web portal. Further information about establishing accounts through MSRB Gateway for submissions to the EMMA continuing disclosure service will be published in the near future.

AUTOMATED SUBMISSION INTERFACE

Submission Process and Disclosure Types

Each submission through the automated submission interface will consist of two messages – a data message and a document message, as described below. The automated submission interface will accept three disclosure types:

<u>Financial/operating data disclosure</u>. This disclosure type is used to submit financial/operating data disclosure documents and related indexing data.

Event-based disclosure. This disclosure type is used to submit event-based disclosure documents and related indexing data.

Unindexed disclosure under pre-July 1, 2009 continuing disclosure undertaking.

This disclosure type is available solely for a Rule 15c2-12-based continuing disclosure submission made pursuant to a continuing disclosure undertaking entered into prior to July 1, 2009 in which the issuer, obligated person or their agent elects to withhold indexing information, to the extent permitted under the Rule 15c2-12 Amendment Approval. This disclosure type is not available for additional/voluntary continuing disclosures. In addition, submitters are strongly encouraged to make all submissions with full indexing information as financial/operating data or event-based disclosures regardless of when the continuing disclosure undertaking was entered into.

Overview of Message Processing, Schemas and Data Tags

This notice links to a series of figures and tables providing more detailed information about the automated submission interface process. A message processing overview is included in Figure 1. XML schemas for data messages and document messages, together with a type definition schema, are included in Figure 2. A data tag glossary is provided in Figure 3. Messages will be validated and EMMA will return response messages to the submitter's system. A table of validation response messages is included in Figure 4.

-

See footnote 145 of the Rule 15c2-12 Amendment Approval, supra note 1.

In connection with each submission of a continuing disclosure document, the submitter would sequence its submission of messages such that the data message would be submitted prior to the related document message. Upon successful submission of the document message through the automated submission interface, EMMA would provide a response message that includes, among other things, a submission identifier that the submitter would include in the related document message. The document message would then be submitted through the automated submission interface. A submitter making bulk submissions may alternate submissions between data messages and document messages to maintain the appropriate sequencing, or may stream multiple data messages and subsequently stream multiple document messages, or may choose such other submission protocol as it may determine, depending on the submitter's preferences, so long as such protocol ensures the proper matching of submission identifiers generated from data submissions with the related document submissions.

Data Message

Data will be submitted through the automated submission interface as SOAP messages. Data elements to be submitted in a data message will be organized in a hierarchical relationship into the following categories: (i) submission data; (ii) disclosure indexing data; and (iii) contact information data. These categories, and the available data tags applicable to each category, are included in Figure 3. Each message also must include a header containing an authentication token and web services protocol support, as illustrated in Figure 5. Sample XML data messages are included in Figure 6.

The data elements available for a data message, together with the value to be selected or entered, would be as follows:¹⁵

• submission data –

- (i) submission status (select 'publish', 'test')
- (ii) submission identifier (if modifying a prior submission, enter ID of prior submission)

• disclosure indexing data –

- (i) disclosure type (select 'financial/operating filing', 'event filing', 'disclosure without indexing information for pre-July 1, 2009 undertaking')
- (ii) financial/operating disclosure category (select all that apply from: 'annual financial information/operating data under Rule 15c2-12', 'audited financial statements or CAFR under Rule 15c2-12', 'failure to provide annual financial

Data elements and enumerated values from which specific selections are to be made are more fully described in the data tag glossary in Figure 3.

- information as required under Rule 15c2-12', 'other voluntary financial/operating data')¹⁶
- (iii) event disclosure category (select all that apply from: 'principal and interest payment delinquencies', 'non-payment related defaults', 'unscheduled draws on debt service reserves reflecting financial difficulties', 'unscheduled draws on credit enhancements reflecting financial difficulties', 'substitution of credit or liquidity providers or their failure to perform', 'adverse tax opinions or events affecting the tax-exempt status of the security', 'modifications to rights of security holders', 'bond calls', 'defeasances', 'release, substitution or sale of property securing repayment of the securities', 'rating changes', 'other voluntary event-based disclosures')¹⁷
- (iv) other voluntary disclosure description (for other voluntary financial/operating data or other voluntary event-based disclosures, enter description)
- (v) period type (for financial/operating disclosure with dates expressed as a range, select 'year ended', 'quarter ended', 'month beginning', 'other period beginning')¹⁸
- (vi) disclosure period (for financial/operating disclosure, enter date(s) on an 'as of', 'beginning date' or 'ending date' basis; period type 'other period beginning' includes both 'beginning date' and 'ending date' optional for event disclosure,

Enumerated values for additional or voluntary financial/operating data disclosure categories that are subject to approval of the Voluntary Disclosure Proposal include: 'quarterly/monthly financial information', 'change in fiscal year/timing of annual disclosure', 'change in accounting standard', 'interim/additional financial information/operating data', 'budget', 'investment/debt/financial policy', 'material provided to rating agency or credit/liquidity provider', and 'consultant reports'.

Enumerated values for additional or voluntary event disclosure categories that are subject to approval of the Voluntary Disclosure Proposal include: 'amendment to continuing disclosure undertaking', 'change in obligated person', 'notice to investors pursuant to bond documents', 'communication from the Internal Revenue Service', 'tender offer/secondary market purchases', 'bid for auction rate or other securities', 'capital or other financing plan', 'litigation or enforcement action', 'merger, consolidation, reorganization, insolvency or bankruptcy', 'change of trustee, tender agent, remarketing agent, or other on-going party', 'derivative or other similar transaction'.

The beta platform selections for this element differ and instead include 'fiscal year', 'calendar year' and 'quarterly'. Test submissions made to the beta platform should use the elements as reflected in this footnote rather than in the main body.

- with 'as of' date entered if document date is different from date submitted to EMMA)¹⁹
- (vii) CUSIP-6 securities pointer (enter six-digit CUSIP number(s) disclosure applicable to all nine-digit CUSIP numbers beginning with this six digits)
- (viii) securities (enter nine-digit CUSIP number(s) to which disclosure is applicable)

• contact information data –

- (i) contact organization type (select 'issuer', 'obligated person')
- (ii) contact organization name (enter full name of organization to contact regarding submitted disclosure)
- (iii) contact first name (enter first name of contact person)
- (iv) contact last name (enter last name of contact person)
- (v) contact title (enter title of contact person)
- (vi) contact phone number (enter phone number of contact person)
- (vii) contact phone number extension (enter extension, if any, of contact person)
- (viii) contact address (enter street/post office address of contact person)
- (ix) contact city (enter city of contact person)
- (x) contact state (enter state of contact person)
- (xi) contact zip code (enter zip code of contact person)
- (xii) contact e-mail address (enter e-mail address of contact person)

Document Submission and Document Message

Documents will be submitted through the automated submission interface as SOAP messages. Data elements to be submitted in a document message will be organized in a hierarchical relationship into the following categories: (i) submission data; and (ii) document data. The document message will be organized so that these data elements are included in the message header, along with an authentication token and web services protocol support. The authentication token and web services protocol support to be included in the header are illustrated in Figure 5. The PDF file of the document, as a binary file encoded in MTOM (SOAP Message Transmission Optimization Mechanism), will constitute the body of the document message. Sample XML document messages are included in Figure 6.

The element available for a document message, together with the value to be selected, would be as follows:²⁰

The beta platform selections for this element differ and instead include 'from date', 'to date' and 'end as of date'. Test submissions made to the beta platform should use the elements as reflected in this footnote.

Element and enumerated values from which specific selections are to be made are more fully described in the data tag glossary in Figure 3.

• submission data –

- (i) submission status (select 'publish', 'test')
- (ii) submission identifier (enter identification number assigned by EMMA to related data message)

• document data –

(i) document posting operation indicator (if modifying a previously submitted document, select 'append to posted document', 'replace posted document')

CONTINUING DISCLOSURE SUBSCRIPTION SERVICE

The proposed real-time data stream subscription to the EMMA continuing disclosure service would be made available for an annual fee of \$45,000.²¹ The continuing disclosure subscription service would make available to subscribers all continuing disclosure documents and related information provided by submitters through the EMMA submission process that is posted on the EMMA portal. Such documents and information would be made available to subscribers simultaneously with the posting thereof on the EMMA portal.

Data with respect to the EMMA continuing disclosure service to be provided through the real-time data stream, and the processes for receiving data and documents through the subscription service, are described below. The EMMA Continuing Disclosure Subscriber Manual would set forth a complete, up-to-date listing of all data elements made available through the continuing disclosure subscription service, including detailed definitions of each data element, specific data format information, and information about technical data elements to support transmission and data-integrity processes between EMMA and subscribers.

The MSRB would make the continuing disclosure subscription service available on an equal and non-discriminatory basis. In addition, the MSRB would not impose any limitations on or additional charges for redistribution of such documents by subscribers to their customers, clients or other end-users. Subscribers would be subject to all of the terms of the subscription agreement to be entered into between the MSRB and each subscriber, including proprietary rights of third parties in information provided by such third parties that is made available through the subscription. The MSRB would not be responsible for the content of the information or documents submitted by submitters distributed to subscribers through the continuing disclosure subscription service.

The proposed subscription price would cover a portion of the administrative, technical and operating costs of the EMMA continuing disclosure subscription service but would not cover all costs of such subscription service or of the EMMA continuing disclosure service. The MSRB has proposed establishing the subscription price at a fair and reasonable level consistent with the MSRB's objective that subscriptions be made available on terms that promote the broad dissemination of documents and data throughout the marketplace.

Web Service

The MSRB will expose two web service interfaces to allow subscribers to receive SOAP (Simple Object Access Protocol) standard XML (extensible markup language) messages and PDF (portable document format) documents using secure, computer-to-computer communications. These interfaces will be remotely consumed by applications written by or for subscribers in a wide variety of programming languages and running on a wide variety of platforms. Subscribers to the continuing disclosure subscription service will connect to the web service interfaces as follows:

For data files:

https://services.emma.msrb.org/SubscriptionServices/ContinuingDisclosureSubscriptionService.svc

For document files:

https://services.emma.msrb.org/SubscriptionServices/DocumentRetrievalService.svc

Note that these connections are not currently operational and the MSRB will provide notice when they becomes available. In addition, the MSRB expects to provide a test platform for potential subscribers and will provide notice and related details when such test platform becomes available.

Data and Document Feed Process

The continuing disclosure subscription service will provide XML files of data and PDF files of continuing disclosure documents.

Data file dissemination. Publicly disseminated information submitted to EMMA will normally be staged for subscriber access simultaneously with the posting of such publicly disseminated information to the EMMA web portal. Subscribers would poll the subscription web service, at a frequency to be determined by each subscriber, by issuing a data request to receive the next available data from continuing disclosure submissions (whether submitted through the automated submission interface or the web form submission interface), based on subscriber-determined parameters. EMMA will bundle into a single XML file data from up to 200 data submissions for transmission to subscribers. The XML file will include file reference identifiers for each PDF file for use by subscribers in polling the subscription web service and in associating them to the related data. Depending on the subscriber's polling parameters, subscribers will be able to access information through the continuing disclosure subscription service on an effectively real-time basis.

<u>Document dissemination</u>. Documents submitted to EMMA normally will be available for subscriber access simultaneously with the posting of such documents to the EMMA web portal. Subscribers would issue document requests, at a frequency to be determined by each subscriber, to receive any available documents based on the file reference identifiers provided in

the XML files disseminated to subscribers. Each document will be transmitted to subscribers as individual PDF files. Depending on the subscriber's parameters for issuing document requests, subscribers will be able to access documents through the continuing disclosure subscription service on an effectively real-time basis, subject to transmission limitations resulting from the potentially large size of some document files and the speed of the subscriber's connection.

Overview of Message Processing, Schemas and Data Tags

This notice links to a series of figures and tables providing more detailed information about the continuing disclosure subscription service. A message processing overview is included in Figure 7. An XML data schema and a type definition schema are included in Figure 8. A data tag glossary is provided in Figure 9. The descriptions of the submission data elements to be provided by submitters to EMMA through the automated submission interface as set forth above in this notice provide more detailed information about the data elements to be disseminated to subscribers through the continuing disclosure subscription service.

Data Message

Data elements to be disseminated through the continuing disclosure subscription service will be organized in a hierarchical relationship into the following categories: (i) subscriber data; (ii) submission data; (iii) disclosure indexing data; (iv) contact information data; and (v) document data. These categories, and the available data tags applicable to each category, are summarized below:

• subscriber data –

- (i) submission transaction count (indicates number of submissions in data message)
- (ii) replay date (if data replay requested by subscriber, indicates period of data replay)

• submission data –

- (i) submission identifier (uniquely identifies submission being disseminated)
- (ii) submission transaction date and time (indicates EMMA posting date and time)

disclosure indexing data –

(i) disclosure type (financial/operating filing, event filing, disclosure without indexing information for pre-July 1, 2009 undertaking)

(ii) financial/operating disclosure category (as applicable – annual financial information/operating data under Rule 15c2-12, audited financial statements or CAFR under Rule 15c2-12, failure to provide annual financial information as required under Rule 15c2-12, other voluntary financial/operating data)²²

Additional or voluntary financial/operating data disclosure categories that are subject to approval of the Voluntary Disclosure Proposal include: quarterly/monthly financial information; change in fiscal year/timing of annual disclosure; change in accounting (continued . . .)

- (iii) event disclosure category (as applicable principal and interest payment delinquency, non-payment related default, unscheduled draw on debt service reserve reflecting financial difficulties, unscheduled draw on credit enhancement reflecting financial difficulties, substitution of credit or liquidity provider or its failure to perform, adverse tax opinion or event affecting the tax-exempt status of the security, modification to the rights of security holders, bond call, defeasance, release, substitution or sale of property securing repayment of the security, rating change, other voluntary event-based disclosure)²³
- (iv) other voluntary disclosure description (for other voluntary financial/operating data or other voluntary event-based disclosures)
- (v) financial/operating period type (for financial/operating disclosure year ended, quarter ended, month beginning, other period beginning, as of)
- (vi) financial/operating disclosure date (for financial/operating disclosure, date of financial/operating period type)
- (vii) financial/operating disclosure second date (for financial/operating disclosure, end date of financial/operating period type if 'other period beginning' selected)
- (viii) event disclosure date (for event disclosure date of document if different from date document submitted to EMMA)
- (ix) CUSIP-6 securities pointer (six-digit CUSIP number(s) disclosure applicable to all nine-digit CUSIP numbers beginning with this six digits)
- (x) securities (nine-digit CUSIP number(s) to which disclosure is applicable)

• contact information data –

- (i) contact organization type (issuer, obligated person, submitter)
- (ii) contact organization name
- (iii) contact first name
- (iv) contact last name
- (v) contact title
- (vi) contact phone number

(... continued)

standard; interim/additional financial information/operating data; budget; investment/debt/financial policy; material provided to rating agency or credit/liquidity provider; and consultant reports.

Additional or voluntary event disclosure categories that are subject to approval of the Voluntary Disclosure Proposal include: amendment to continuing disclosure undertaking; change in obligated person; notice to investors pursuant to bond documents; communication from the Internal Revenue Service; tender offer/secondary market purchases; bid for auction rate or other securities; capital or other financing plan; litigation or enforcement action; merger, consolidation, reorganization, insolvency or bankruptcy; change of trustee, tender agent, remarketing agent, or other on-going party; derivative or other similar transaction.

- (vii) contact phone number extension
- (viii) contact address
- (ix) contact city
- (x) contact state
- (xi) contact zip code
- (xii) contact e-mail address

• document data –

- (i) document identifier (uniquely identifies submission being disseminated)
- (ii) document posting date (date first file of document posted to public on EMMA)
- (iii) document posting operation indicator (if document modifies a previously submitted document append to posted document, replace posted document)

Examples of XML files disseminating data submissions for various types of continuing disclosures are included in Figure 10.

* * * * *

Questions on this notice may be directed to Steve Cook, Director of Systems Development, or Ernesto A. Lanza, General Counsel, at (703) 797-6600. Written comments on the proposed rule change should be submitted to the SEC.

April 22, 2009

* * * * *

PRELIMINARY SPECIFICATIONS – INDEX OF FIGURES

- 1 Submission Message Processing Overview
- 2 Submission Data Message, Document Message & Type Definition Schemas
- 3 Submission Data Tag Glossary
- 4 Submission Validation Response Messages
- 5 Submission Sample XML Header
- 6 Submission Sample Data and Document XML Messages
- 7 Subscription Message Processing Overview
- 8 Subscription Data Message & Type Definition Schema
- 9 Subscription Data Tag Glossary
- 10 Subscription Sample XML Files

* * * * *

TEXT OF PROPOSED RULE CHANGE

MUNICIPAL SECURITIES RULEMAKING BOARD ELECTRONIC MUNICIPAL MARKET ACCESS SYSTEM – EMMA®

EMMA SUBSCRIPTION SERVICES

EMMA Continuing Disclosure Subscription Service

The real-time data stream subscription to the EMMA continuing disclosure service through the EMMA subscription web service will be available for an annual fee of \$45,000. The EMMA continuing disclosure subscription service makes available to subscribers all continuing disclosure documents, together with related indexing information provided by submitters through the submission process of the EMMA continuing disclosure service, that is posted on the EMMA portal. Such documents and information will be made available to subscribers simultaneously with the posting thereof on the EMMA portal. Issuers, obligated persons and their agents submitting information and documents to EMMA may provide or modify such items for a particular submission in one or more sessions ("submission events"), and any such items provided or modified will be made available to subscribers upon posting to the EMMA portal.

Data elements with respect to the EMMA continuing disclosure service to be provided through the real-time data stream shall be set forth in the EMMA Continuing Disclosure Subscriber Manual posted on the EMMA portal. Each submission event will result in an XML data packet to be included in the subscription feed. Each submission event packet will include data organized in a hierarchical data relationship generally consisting of (to the extent applicable for a particular submission event) XML containers for submission data, disclosure indexing data, contact information data, and document data. These XML containers will contain some, all or none of the following types of data elements, as appropriate for each submission event being disseminated:

Submission Data: submission ID; submission transaction date/time

Disclosure

Indexing Data: disclosure type; financial/operating disclosure category; event disclosure

category; other voluntary disclosure description; disclosure dates; CUSIP

numbers

Contact

Information Data: contact organization type; contact name; address; phone number; e-mail

address

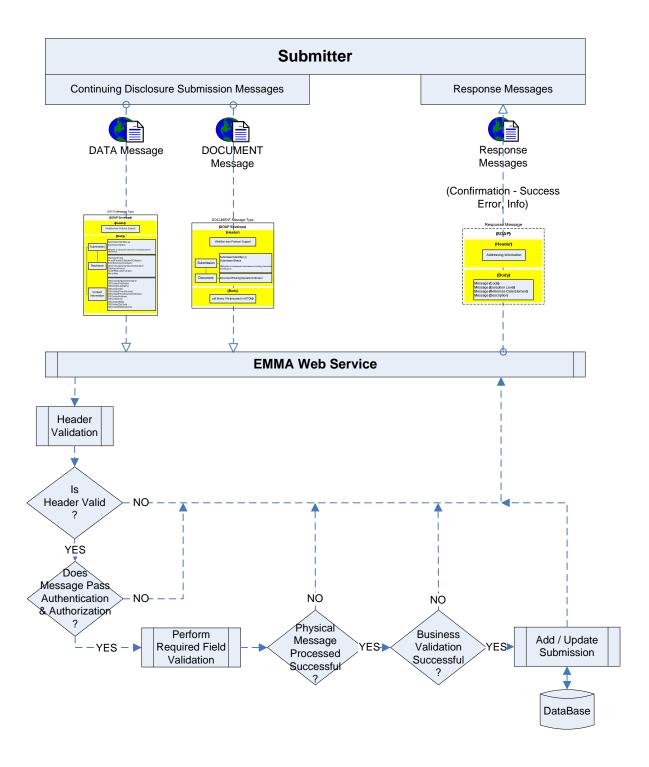
Document Data: document ID; document posting date; document status indicator

The EMMA Continuing Disclosure Subscriber Manual provides a complete, up-to-date listing of all data elements made available through the EMMA continuing disclosure subscription service, including any additions, deletions or modifications to disseminated data elements, detailed definitions of each data element, specific data format information, and information about technical data elements to support transmission and data-integrity processes between EMMA and subscribers.

Subscriptions will be provided through computer-to-computer data streams utilizing XML files for data and files in a designated electronic format (consisting of PDF files) for documents. Appropriate schemas and other technical specifications for accessing the web services through which the real-time data stream will be provided are set forth in the EMMA Continuing Disclosure Subscriber Manual posted on the EMMA portal.

The MSRB makes the EMMA continuing disclosure subscription service available on an equal and non-discriminatory basis. In addition, the MSRB does not impose any limitations on or additional charges for redistribution of such documents by subscribers to their customers, clients or other end-users. Subscribers shall be subject to all of the terms of the subscription agreement to be entered into between the MSRB and each subscriber, including proprietary rights of third parties in information provided by such third parties that is made available through the subscription. The MSRB is not responsible for the content of the information or documents submitted by submitters that is distributed to subscribers of the EMMA continuing disclosure subscription service.

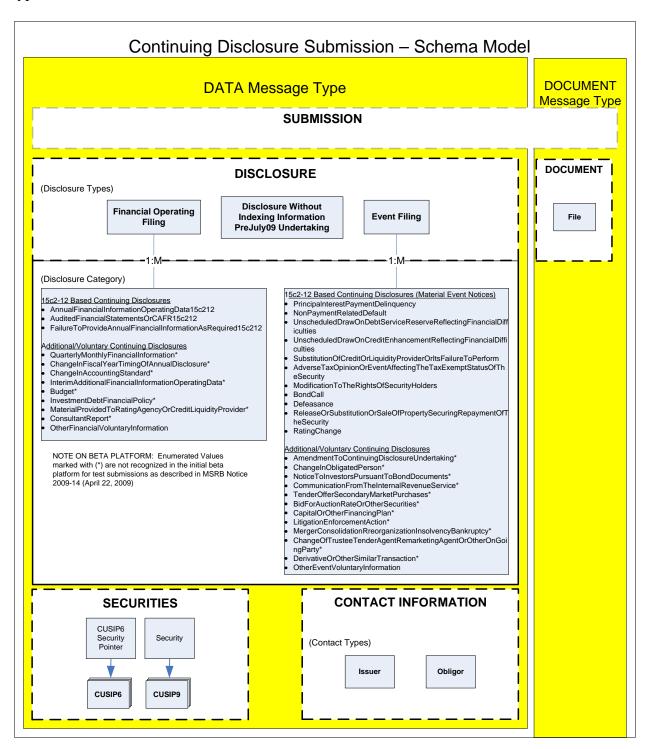
MESSAGE PROCESSING OVERVIEW

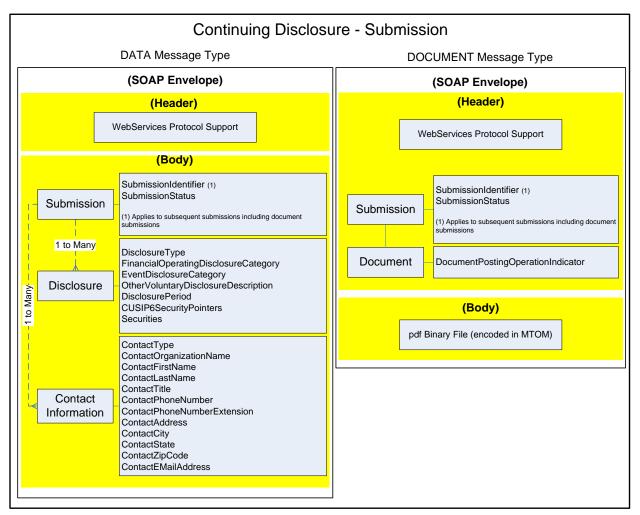


EMMA Continuing Disclosure Automated Submission Interface Specifications

DATA MESSAGE, DOCUMENT MESSAGE & TYPE DEFINITION SCHEMAS

Set forth below is a schema model showing the two message types (Data and Document) required to make a submission. Within each message type are information containers (Submission, Disclosure, Securities, Contact Information, and Document) and the information types and values associated with each.





SOAP (Simple Object Access Protocol) - foundation layer of the web services protocol stack MTOM (SOAP Message Transmission Optimization Mechanism) - a method of efficiently sending binary data to and from web services

XML MESSSAGE SCHEMAS

Detailed below are three (3) schemas; Data, Document, and a common Type Definition schema that is included in each of the Data and Document schemas by reference. The Data and Document schemas describe the base structural containers which in turn reference child-level containers and specifications described in the Type Definition schema. The schemas are universally applicable to Data and Document Messages for Continuing Disclosure submissions.

Data Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBMISSION-XML" targetNamespace="EMMA-SUBMISSION-XML"
elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
        <xs:include schemaLocation="..."/>
        <xs:element name="ContinuingDisclosureMessage" type="DataMessageType"/>
        <!-- Type Definition starts -->
        <xs:complexType name="DataMessageType">
                 <xs:sequence>
                         <xs:element name="Submission" type="SubmissionDetailsType" minOccurs="1" maxOccurs="1"/>
                         <xs:element name="DisclosureIndexingData" type="DisclosureIndexingDataDetailsType" minOccurs="1" maxOccurs="1"/>
                         <xs:element name="ContactInformation" type="ContactInformationType" minOccurs="0" maxOccurs="2"/>
                 </xs:sequence>
        </r></rr></rr>
        <!-- Type definition ends -->
</xs:schema>
Document Message Schema
```

```
<!-- Type definition ends --> </xs:schema>
```

Type Definition Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBMISSION-XML" targetNamespace="EMMA-SUBMISSION-XML"
elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
        <!-- Type Definition starts -->
        <xs:complexType name="SubmissionDetailsType">
          <xs:attribute name="SubmissionIdentifier" type="Max25Text"/>
                <xs:attribute name="SubmissionStatus" type="SubmissionStatusType"/>
        </xs:complexType>
        <xs:complexType name="DisclosureIndexingDataDetailsType">
                <xs:sequence>
                        <xs:element name="Disclosure" type="DisclosureDetailsType" maxOccurs="unbounded" />
                        <xs:element name="CUSIP6SecurityPointers" type="CUSIP6SecurityPointerDetailsType" minOccurs="0" maxOccurs="1" />
                        <xs:element name="Securities" type="SecuritiesDetailsType" minOccurs="0" maxOccurs="1" />
                </xs:sequence>
        </xs:complexType>
        <xs:complexType name="DisclosureDetailsType">
                <xs:sequence>
                        <xs:element name="DisclosurePeriod" type="DisclosurePeriodType" minOccurs="0" maxOccurs="1" />
                </xs:sequence>
                <xs:attribute name="DisclosureType" type="DisclosureTypes"/>
                <xs:attribute name="FinancialOperatingDisclosureCategory" type="FinancialOperatingDisclosureCategoryType"/>
                <xs:attribute name="EventDisclosureCategory" type="EventDisclosureCategoryType"/>
                <xs:attribute name="OtherVoluntaryDisclosureDescription" type="Max140Text"/>
        </xs:complexType>
        <xs:complexType name="DisclosurePeriodType">
                <xs:attribute name="PeriodType" type="PeriodDetailsType"/>
                <xs:attribute name="AsOfDate" type="ISODate"/>
                <xs:attribute name="BeginningDate" type="ISODate"/>
                <xs:attribute name="EndingDate" type="ISODate"/>
        </xs:complexType>
        <xs:complexType name="CUSIP6SecurityPointerDetailsType">
                <xs:sequence>
                        <xs:element name="CUSIP6SecurityPointer" type="CUSIP6SecurityPointerType" minOccurs="0" maxOccurs="unbounded"/>
```

```
</xs:sequence>
</xs:complexType>
<xs:complexType name="SecuritiesDetailsType">
        <xs:sequence>
                <xs:element name="Security" type="SecurityType" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
</xs:complexType>
<xs:complexType name="CUSIP6SecurityPointerType">
        <xs:attribute name="CUSIP6" type="Cusip6Type"/>
</xs:complexType>
<xs:complexType name="SecurityType">
        <xs:attribute name="CUSIP9" type="Cusip9Type"/>
</xs:complexType>
<xs:complexType name="DocumentDetailsType">
        <xs:attribute name="DocumentPostingOperationIndicator" type="DocumentPostingOperationIndicatorType"/>
</xs:complexType>
<xs:complexType name="ContactInformationType">
        <xs:attribute name="ContactType" type="ContactTypeDetails"/>
        <xs:attribute name="ContactOrganizationName" type="Max140Text"/>
        <xs:attribute name="ContactFirstName" type="Max25Text"/>
        <xs:attribute name="ContactLastName" type="Max25Text"/>
        <xs:attribute name="ContactPhoneNumber" type="Max15Text"/>
        <xs:attribute name="ContactPhoneNumberExtension" type="Max6Text"/>
        <xs:attribute name="ContactAddress" type="Max140Text"/>
        <xs:attribute name="ContactCity" type="Max25Text"/>
        <xs:attribute name="ContactState" type="StateCode"/>
        <xs:attribute name="ContactZipCode" type="Max15Text"/>
        <xs:attribute name="ContactEMailAddress" type="Max50Text"/>
</xs:complexType>
<xs:simpleType name="PeriodDetailsType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="YearEnded"/>
                <xs:enumeration value="QuarterEnded"/>
                <xs:enumeration value="MonthBeginning"/>
                <xs:enumeration value="OtherPeriodBeginning"/>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ContactTypeDetails">
```

```
<xs:restriction base="xs:string">
                <xs:enumeration value="Issuer"/>
                <xs:enumeration value="Obligor"/>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="SubmissionStatusType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="Publish"/>
                <xs:enumeration value="Test"/>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DisclosureTypes">
        <xs:restriction base="xs:string">
                <xs:enumeration value="FinancialOperatingDataDisclosure"/>
                <xs:enumeration value="EventBasedDisclosure"/>
                <xs:enumeration value="DisclosureWithoutIndexingInformationPreJuly2009Undertaking"/>
        </r></restriction>
</xs:simpleType>
<xs:simpleType name="FinancialOperatingDisclosureCategoryType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="AnnualFinancialInformationOperatingData15c212"/>
                <xs:enumeration value="AuditedFinancialStatementsOrCAFR15c212"/>
                <xs:enumeration value="FailureToProvideAnnualFinancialInformationAsRequired15c212"/>
                <xs:enumeration value="QuarterlyMonthlyFinancialInformation"/>
                <xs:enumeration value="ChangeInFiscalYearTimingOfAnnualDisclosure"/>
                <xs:enumeration value="ChangeInAccountingStandard"/>
                <xs:enumeration value="InterimAdditionalFinancialInformationOperatingData"/>
                <xs:enumeration value="Budget"/>
                <xs:enumeration value="InvestmentDebtFinancialPolicy"/>
                <xs:enumeration value="MaterialProvidedToRatingAgencyOrCreditLiquidityProvider"/>
                <xs:enumeration value="ConsultantReport"/>
                <xs:enumeration value="OtherFinancialVoluntaryInformation"/>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="EventDisclosureCategoryType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="PrincipalnterestPaymentDelinquency"/>
                <xs:enumeration value="NonPaymentRelatedDefault"/>
```

```
<xs:enumeration value="UnscheduledDrawOnDebtServiceReserveReflectingFinancialDifficulties"/>
                <xs:enumeration value="UnscheduledDrawOnCreditEnhancementReflectingFinancialDifficulties"/>
                <xs:enumeration value="SubstitutionOfCreditOrLiquidityProviderOrItsFailureToPerform"/>
                <xs:enumeration value="AdverseTaxOpinionOrEventAffectingTheTaxExemptStatusOfTheSecurity"/>
                <xs:enumeration value="ModificationToTheRightsOfSecurityHolders"/>
                <xs:enumeration value="BondCall"/>
                <xs:enumeration value="Defeasance"/>
                <xs:enumeration value="ReleaseOrSubstitutionOrSaleOfPropertySecuringRepaymentOfTheSecurity"/>
                <xs:enumeration value="RatingChange"/>
                <xs:enumeration value="AmendmentToContinuingDisclosureUndertaking"/>
                <xs:enumeration value="ChangeInObligatedPerson"/>
                <xs:enumeration value="NoticeToInvestorsPursuantToBondDocuments"/>
                <xs:enumeration value="CommunicationFromTheInternalRevenueService"/>
                <xs:enumeration value="TenderOfferSecondaryMarketPurchases"/>
                <xs:enumeration value="BidForAuctionRateOrOtherSecurities"/>
                <xs:enumeration value="CapitalOrOtherFinancingPlan"/>
                <xs:enumeration value="LitigationEnforcementAction"/>
                <xs:enumeration value="MergerConsolidationRreorganizationInsolvencyBankruptcy"/>
                <xs:enumeration value="ChangeOfTrusteeTenderAgentRemarketingAgentOrOtherOnGoingParty"/>
                <xs:enumeration value="DerivativeOrOtherSimilarTransaction"/>
                <xs:enumeration value="OtherEventVoluntaryInformation"/>
        </xs:restriction>
</xs:simpleType>
        <xs:simpleType name="DocumentPostingOperationIndicatorType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="AppendToPostedDocment"/>
                <xs:enumeration value="ReplacePostedDocument"/>
        </r></restriction>
</xs:simpleType>
<xs:simpleType name="Cusip6Type">
        <xs:restriction base="xs:string">
                <xs:minLength value="6"/>
                <xs:maxLength value="6"/>
        </xs:restriction>
</r></rs:simpleType>
<xs:simpleType name="Cusip9Type">
        <xs:restriction base="xs:string">
                <xs:minLength value="9"/>
```

```
<xs:maxLength value="9"/>
       </r></restriction>
</xs:simpleType>
<xs:simpleType name="StateCode">
       <xs:restriction base="xs:string">
               <xs:pattern value="[A-Z]{2,2}"/>
       </ri>
</xs:simpleType>
<xs:simpleType name="ISODate">
       <xs:restriction base="xs:date"/>
</xs:simpleType>
<xs:simpleType name="Max140Text">
       <xs:restriction base="xs:string">
               <xs:minLength value="1"/>
               <xs:maxLength value="140"/>
       </ri>
</r></re></re>
<xs:simpleType name="Max75Text">
       <xs:restriction base="xs:string">
               <xs:minLength value="1"/>
               <xs:maxLength value="75"/>
       </ri>
</r></rs:simpleType>
<xs:simpleType name="Max50Text">
       <xs:restriction base="xs:string">
               <xs:minLength value="1"/>
               <xs:maxLength value="50"/>
       </ri>
</r></rr></rr>
<xs:simpleType name="Max25Text">
       <xs:restriction base="xs:string">
               <xs:minLength value="1"/>
               <xs:maxLength value="25"/>
       </ri>
</r></rs:simpleType>
<xs:simpleType name="Max15Text">
       <xs:restriction base="xs:string">
               <xs:minLength value="1"/>
```

FIGURE 3

SUBMISSION – DATA TAG GLOSSARY

Set forth below is a glossary of all data tags to be used in EMMA's automated submission interface for submissions of data messages and document messages. These data elements are organized in a hierarchical data relationship. This glossary sets out each data element's XML container, data tag, definition and data specifications, including a listing of enumerated values for those data elements where the submitter is to choose a value and an example of the data format where the submitter is to enter a value.

Submission Data Tags Description and Specification

EMMA Continuing Disclosure Service

XML Container	Data Tag	Definition	Data Specification	Required / Optional
Submission	Submission Identifier	Unique identifier assigned by EMMA at time of initiation of data submission (the initial submission event) and used by the submitter in connection with subsequent submission events, including document submission	Max25Text ex: S212345678910	As Applicable
	Submission Status	Indicates the intention to publish the information in the EMMA public portal or to submit as test submission – test submissions are not disseminated	Enumerated Value: Publish Test	Required

XML Container	Data Tag	Definition	Data Specification	Required / Optional
Disclosure	Disclosure Type	Indicates the type of continuing disclosure filing as follows: Financial Operating Filing - Submit annual financial information under SEC Rule 15c2-12(b)(5)(i)(A) and (d)(2)(ii)(A), audited financial statements under Rule 15c2-12(b)(5)(i)(B), notice of failure to provide annual financial information under Rule 15c2-12(b)(5)(i)(D), and other voluntary financial or operating information. Fevent Filing - Submit notice of a material event specified under SEC Rule 15c2-12(b)(5)(C) and (d)(2)(ii)(B), and any other event-based voluntary notice or disclosure with respect to municipal securities. DisclosureWithoutIndexingInformationPreJuly09 Undertaking - This continuing disclosure document is being submitted without indexing information in connection with securities subject to a continuing disclosure undertaking entered into prior to July 1, 2009. Unindexed continuing disclosure documents will be posted on the EMMA Portal without indexing information, but accompanied by the submitter's contact information, and also will be disseminated to EMMA's continuing disclosure subscribers together with the submitter's contact information. Filing without indexing information is strongly discouraged - Failure to provide indexing information will dramatically impact the effectiveness of your disclosure to the determent of investors in your securities.	Enumerated Value: • FinancialOperatingDataDisclosure • EventBasedDisclosure • DisclosureWithoutIndexingInformationPreJuly09Un dertaking	Required

XML Container	Data Tag	Definition	Data Specification	Required / Optional
Disclosure	Financial Operating Disclosure Category	Indicates the financial operating disclosure category to which the filing applies. One or more categories may apply to a single filing NOTE ON BETA PLATFORM: Enumerated Values marked with (*) are not recognized in the initial beta platform for test submissions as described in MSRB Notice 2009-14 (April 22, 2009)	 Enumerated Value: AnnualFinancialInformationOperatingData15c212 AuditedFinancialStatementsOrCAFR15c212 FailureToProvideAnnualFinancialInformationAsReq uired15c212 QuarterlyMonthlyFinancialInformation* ChangeInFiscalYearTimingOfAnnualDisclosure* ChangeInAccountingStandard* InterimAdditionalFinancialInformationOperatingData * Budget* InvestmentDebtFinancialPolicy* MaterialProvidedToRatingAgencyOrCreditLiquidity Provider* ConsultantReport* OtherFinancialVoluntaryInformation 	Required for Disclosure Type = Finanical Operating Filing

XML Container	Data Tag	Definition	Data Specification	Required / Optional
Disclosure	Event Disclosure Category	Indicates the event-based disclosure categories to which the filing applies. One or more categories may apply to a single filing ex: a filing may include a notice of Bond Call and Defeasance NOTE ON BETA PLATFORM: Enumerated Values marked with (*) are not recognized in the initial beta platform for test submissions as described in MSRB Notice 2009-14 (April 22, 2009)	 Enumerated Value: PrincipaInterestPaymentDelinquency NonPaymentRelatedDefault UnscheduledDrawOnDebtServiceReserveReflectin gFinancialDifficulties UnscheduledDrawOnCreditEnhancementReflecting FinancialDifficulties SubstitutionOfCreditOrLiquidityProviderOrItsFailure ToPerform AdverseTaxOpinionOrEventAffectingTheTaxExemp tStatusOfTheSecurity ModificationToTheRightsOfSecurityHolders BondCall Defeasance ReleaseOrSubstitutionOrSaleOfPropertySecuringR epaymentOfTheSecurity RatingChange AmendmentToContinuingDisclosureUndertaking* ChangeInObligatedPerson* NoticeToInvestorsPursuantToBondDocuments* CommunicationFromTheInternalRevenueService* TenderOfferSecondaryMarketPurchases* BidForAuctionRateOrOtherSecurities* CapitalOrOtherFinancingPlan* LitigationEnforcementAction* MergerConsolidationRreorganizationInsolvencyBan kruptcy* ChangeOfTrusteeTenderAgentRemarketingAgentO rOtherOnGoingParty* DerivativeOrOtherSimilarTransaction* OtherEventVoluntaryInformation 	Required for Disclosure Type = Event Filing
	Other Voluntary Disclosure Description	Indicates the description of a voluntary disclosure filing for Financial Operating Disclosure or Event Disclosure	Max140Text ex: Description of other voluntary disclosure	As Applicable

XML Container	Data Tag	Definition	Data Specification	Required / Optional
	Period Type	For Financial Operating Filings, is used to indicate if the type of period covered by the filing. The period type is used in combination with Disclosure Period ex. PeriodType < YearEnded> < EndingDate, 2008-12-31> NOTE ON BETA PLATFORM: The initial beta platform selections for this element differ and instead include 'fiscal year', 'calendar year' and 'quarterly'. Test submissions made to the beta platform should use these alternative elements.	Enumerated Value: • YearEnded • QuarterEnded • MonthBeginning • OtherPeriodBeginning	Required for Disclosure Type = Finanical Operating Filing
Disclosure	Disclosure Period	For Financial Operating Filings, used in conjunction with Period Type to indicate the applicable beginning and/or end date(s) For Event Filings, used without Period Type to indicate as of date of submitted document if other than the actual date of submission ex: Financial Operating Filing – Audited Financial Statements or CAFR (Rule 15c2-12) – PeriodType < OtherPeriodBeginning> < Beginning Date, 2009-06-31> < Event Filing – Bond Call < AsOfDate, 2009-12-31> NOTE ON BETA PLATFORM: The initial beta platform selections for this element differ and instead include 'from date', 'to date' and 'end as of date'. Test submissions made to the beta platform should use these alternative elements.	Attributes: Period Type (see enumerated values above) AsOfDate (ISODate) ex: 2009-06-31 BeginningDate (ISODate) ex: 2009-09-30 EndingDate (ISODate) ex: 2009-12-31	Required for Disclosure Type = Finanical Operating Filing/ Optional for Disclosure Type = Event Filing

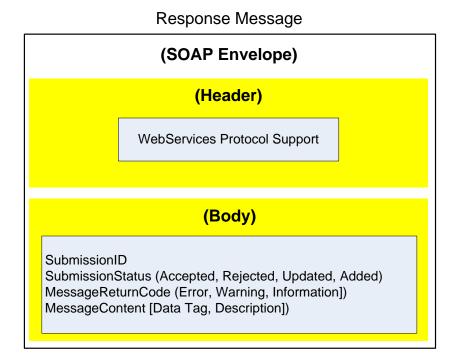
XML Container	Data Tag	Definition	Data Specification	Required / Optional
Disclosure	CUSIP6 Security Pointers	Indicates the six-digit CUSIP6 number(s) to which the disclosure applies if a disclosure applies to ALL securities under that CUSIP6.	String{Min6,Max6} ex: 123456	As Applicable (CUSIP6 Security Pointers and/or Securities Required for Disclosure Type = Finanical Operating Filing or Event Filing)
	Securities	Indicates the nine-digit CUSIP number(s) to which the disclosure applies NOTE: B2B submissions are not available for ineligible for CUSIP number assignment filings	String{Min9,Max9} ex: 123456AB7	As Applicable (Securities and/or CUSIP6 Security Pointers Required for Disclosure Type = Finanical Operating Filing or Event Filing)
Document	Document Posting Operation Indicator	Only for modifications of original document submissions – Indicates whether file will be appended to any existing files posted for such document or if file will replace all existing files posted for such document	Enumerated Value: • AppendToPostedDocument • ReplacePostedDocument	As Applicable
	Contact Type	Indicates organization type of contact that the public should contact with questions about the submitted disclosure	Enumerated Value: • Issuer • Obligor	Optional
Contact Information	Contact Organization Name	Full name of the contact organization that the public should contact with questions about the submitted disclosure	Max140Text ex: MuniBond Dealer	Required if contact provided
	Contact First Name	The first name of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Emma	Required if contact provided

XML Container	Data Tag	Definition	Data Specification	Required / Optional
	Contact Last Name	The last name of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Jones	Required if contact provided
	Contact Title	The title of the contact person that the public should contact with questions about the submitted disclosure	Max140Text ex: Senior Vice President	Required if contact provided
	Contact Phone Number	The phone number of the contact person that the public should contact with questions about the submitted disclosure	Max15Text ex: 703-555-2222	Required if contact provided
Contact Information	Contact Phone Number Extension	The extension of the phone number (if any) of the contact person that the public should contact with questions about the submitted disclosure	Max6Text ex: 1235	As Applicable
	Contact Address	The street address or post office box of the contact person that the public should contact with questions about the submitted disclosure	Max140Text ex: 123 Security Road	Required if contact provided
	Contact City	The address city of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Alexandria	Required if contact provided
	Contact State	The address state of the contact person that the public should contact with questions about the submitted disclosure	String;StateCode;2 ex: VA	Required if contact provided
	Contact Zip Code	The address zip code of the contact person that the public should contact with questions about the submitted disclosure	Max15Text ex: 22301-5555	Required if contact provided
	Contact Email Address	The email address of the contact person that the public should contact with questions about the submitted disclosure	Max50Text ex: issuer@issuer.com	Required if contact provided

VALIDATION RESPONSE MESSAGES

As submission messages are processed by EMMA, the message content will be verified relative to business rules of expected data relationships. Exception response messages will be returned to the submitter system when certain types of conditions exist with respect to the data submitted. Currently, all response messages are classified as Error, which indicates termination of message processing with failure of the intended action. The submitter should take appropriate corrective action and re-submit as appropriate.

An abstract representation of a Response Message, shown below, will be returned to the Submitter System with the Response Message Content, defined in the table below, contained in the body of the message.



Below is a sample Response Message trace where a submission event has been confirmed as added successfully. This sample is intended to show the general structure of response messages.

Response Message – Sample Trace File

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Header>
        <Action s:mustUnderstand="1"
xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">http://emma.msrb.org/schemas/disclosureservice/IDisclosureService/OpenSubmissi
onResponse
        </Action>
 </s:Header>
 <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
        <DisclosureMessageResponse xmlns="http://emma.msrb.org/schemas/disclosuremessages">
          <DisclosureResponseDetails xmlns="http://emma.msrb.org/schemas/disclosureservice">
                <Submission SubmissionID="EA1734" SubmissionStatus="Added"</pre>
                         xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
                </Submission>
                <Message MessageReturnCode="Information" MessageContent="Continuing disclosure submission added."</p>
                                xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
                </Message>
          </DisclosureResponseDetails>
        </DisclosureMessageResponse>
  </s:Body>
</s:Envelope>
```

XML Submission Validation - Response Messages

Continuing Disclosure

XML Block	Data Tag	Message Return Code	Response Message Content
Submission	Submission Identifier	Error	Failure to Identify Submission - failed to identify a Submission with the given Submission Identifier (EA1001).
	Submission Status	-	-
	Disclosure Type	Error	Required Field - Disclosure Type is a required field.
	Annual Periodic Disclosure	Error	Category mismatch - Disclosure without indexing information for a pre-July 2009 undertaking was asserted, but indexing information was provided without declaration of the information type.
	Category	Error	Required Field – Financial Operating Disclosure Category is a required field when the disclosure type is Financial Operating Data Disclosure.
	Event Disclosure Category	Error	Category mismatch - Disclosure without indexing information for a pre-July 2009 undertaking was asserted, but indexing information was provided without declaration of the information type.
		Error	Required Field - Event Disclosure Category is a required field with the disclosure types is Event Based Disclosure.
	Other Voluntary Disclosure Description	Error	Required Field – Other Voluntary Disclosure Description is a required field if the disclosure category is either Other Financial Voluntary Information or Other Event Voluntary Information
Disclosure	Period Type	-	-
		Error	Data Validation – Beginning Date must be earlier than the Ending Date.
		Error	Required Field – A Beginning Date and Ending Date is required if the period type is Other Period Beginning.
	Disclosure Period	Error	Required Field - AsOfDate field to be supplied if the Disclosure Type is Event Based Disclosure.
		Error	Required Element – Period Types (Year Ended, Quarter Ended, Month Beginning) require a Beginning Date or Ending Date as appropriate.
	CUSIP6 Security Pointers	Error	Required Element - At least one security or CUSIP-6 must be provided when indexing information is provided.

XML Block	Data Tag	Message Return Code	Response Message Content
	Securities	Error	Data Validation – Security CUSIP9:123456AB7 is not recognized as a well-formed CUSIP9.
Document	Document Posting Operation Indicator	-	
	Contact Organization Name	-	-
	Contact First Name	-	-
	Contact Last Name	-	-
	Contact Title	-	-
	Contact Phone Number	-	-
Contact	Contact Phone Number Extension	-	-
Information	Contact Address	-	-
	Contact City	-	-
	Contact State	-	-
	Contact Zip Code	-	-
	Contact Email Address	-	-
	WebSite	-	-

CONTINUING DISCLOSURE SUBMISSION SAMPLE XML HEADERS

Data Message – Sample Header + Message Trace File

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/" xmlns:u="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-utility-
1.0.xsd" >
        <s:Header>
                <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-
                1.0.xsd"><u:Timestamp u:Id=" 0"><u:Created>2008-08-21T19:58:44.296Z</u:Created><u:Expires>2008-08-21T19:58:44.296Z
               21T20:03:44.296Z</u:Expires></u:Timestamp><o:UsernameToken u:Id="uuid-99a8d3c0-8044-4572-a189-2af1f3a246e8-
                1"><o:Username><!--Removed--></o:UsernameToken></o:Security>
                <To s:mustUnderstand="1" xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">https://temp-
                wrk/EmmaDisclosureService/DisclosureService.svc</To>
                <Action s:mustUnderstand="1"
                xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">http://emma.msrb.org/schemas/disclosureservice/IDisclosureService/Open
               Submission</Action>
        </s:Header>
        <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
                <ContinuingDisclosureMessage xmlns="http://emma.msrb.org/schemas/disclosuremessages">
                        <Submission SubmissionStatus="Publish" />
                        <DisclosureIndexingData>
                                <Disclosure DisclosureType="FinancialOperatingDataDisclosure"</pre>
                                        FinancialOperatingDisclosureCategory="AnnualFinancialInformationOperatingData15c212">
                                        <DisclosurePeriod PeriodType="OtherPeriodBeginning" BeginningDate="2007-06-30"</p>
                                                EndingDate="2008-06-30"/>
                                </Disclosure>
                                <CUSIP6SecurityPointers>
                                        < CUSIP6SecurityPointer CUSIP6="617481"/>
                                        < CUSIP6SecurityPointer CUSIP6="61748P"/>
                                        < CUSIP6SecurityPointer CUSIP6="61748T"/>
                                        < CUSIP6SecurityPointer CUSIP6="617487"/>
                                        < CUSIP6SecurityPointer CUSIP6="617493"/>
                                        < CUSIP6SecurityPointer CUSIP6="617496"/>
                                        < CUSIP6SecurityPointer CUSIP6="617508"/>
                                        <CUSIP6SecurityPointer CUSIP6="617524"/>
                                </CUSIP6SecurityPointers>
```

```
<Securities>
                                       <Security CUSIP9="699438AJ7"/>
                                       <Security CUSIP9="699438AK4"/>
                                       <Security CUSIP9="699438AL2"/>
                                       <Security CUSIP9="699438AM0"/>
                                       <Security CUSIP9="699438AN8"/>
                                       <Security CUSIP9="699438AP3"/>
                                       <Security CUSIP9="699438BD9"/>
                               </Securities>
                       </DisclosureIndexingData>
                       <ContactInformation ContactType="Issuer" ContactOrganizationName="Organization" ContactFirstName="ContactFirstName"
                               ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL"
                               ContactZipCode="55555" ContactPhoneNumber="555-55-555" ContactEMailAddress="Issuer@mail.com"/>
                       <ContactInformation ContactType="Obligor" ContactOrganizationName="Organization" ContactFirstName="ContactFirstName"
                               ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL"
                               ContactZipCode="55555" ContactPhoneNumber="555-55-5555" ContactEMailAddress="Obligor@mail.com"/>
               </ContinuingDisclosureMessage>
       </s:Bodv>
</s:Envelope>
```

Document Message – Sample Header File

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/" xmlns:u="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-utility-
1.0.xsd">
       <s:Header>
              <ContinuingDisclosureMessage xmlns h="http://emma.msrb.org/schemas/disclosureservice"</p>
                      xmlns="http://emma.msrb.org/schemas/disclosureservice" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                      xmlns:xsd="http://www.w3.org/2001/XMLSchema">
                      <Submission SubmissionIdentifier="12345678" SubmissionStatus="Publish"/>
                      <Document DocumentPostingOperationIndicator="AppendToPostedDocment"/>
              </ContinuingDisclosureMessage>
              <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-
              1.0.xsd"><u:Timestamp u:Id=" 0"><u:Created>2008-08-21T19:26:53.468Z</u:Created><u:Expires>2008-08-21T19:26:53.468Z
              21T19:31:53.468Z</u:Expires></u:Timestamp>
              -Removed--></o:Password></o:UsernameToken></o:Security>
              <To s:mustUnderstand="1" xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">https://temp-
              wrk/EmmaDisclosureService/DisclosureService.svc</To>
```

<Action s:mustUnderstand="1"
 xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">http://emma.msrb.org/schemas/disclosureservice/IDisclosureService/Post
 DocumentFile</Action>
</s:Header>
<s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"></since the content of th

[BINARY STREAM OF PDF FILE]

</s:Body>

EMMA Continuing Disclosure Automated Submission Interface Specifications

CONTINUING DISCLOSURE SUBMISSIONS SAMPLE DATA & DOCUMENT XML MESSAGES

FINANCIAL OPERATING FILING

Data Message

```
<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="EMMA-SUBMISSION-XML
C:\EMMA\EMMA_B2B\Schema\ContinuingDisclosure\Submission\EMMA_ContinuingDisclosure_SUBMISSION_DataMessage_Schema_v5.xsd">
       <Submission SubmissionStatus="Publish" />
       <DisclosureIndexingData>
               <Disclosure DisclosureType="FinancialOperatingDataDisclosure"</pre>
                       FinancialOperatingDisclosureCategory="AnnualFinancialInformationOperatingData15c212">
                               <DisclosurePeriod PeriodType="OtherPeriodBeginning" BeginningDate="2008-06-30" EndingDate="2008-06-30"/>
               </Disclosure>
               <Disclosure DisclosureType="FinancialOperatingDataDisclosure" FinancialOperatingDisclosureCategory="ChangeInAccountingStandard">
                               <DisclosurePeriod AsOfDate="2008-07-01"/>
               </Disclosure>
               <CUSIP6SecurityPointers>
                       < CUSIP6SecurityPointer CUSIP6="617481"/>
                       < CUSIP6SecurityPointer CUSIP6="61748P"/>
                       < CUSIP6SecurityPointer CUSIP6="61748T"/>
                       < CUSIP6SecurityPointer CUSIP6="617487"/>
                       < CUSIP6SecurityPointer CUSIP6="617493"/>
                       < CUSIP6SecurityPointer CUSIP6="617496"/>
                       < CUSIP6SecurityPointer CUSIP6="617508"/>
                       < CUSIP6SecurityPointer CUSIP6="617524"/>
               </CUSIP6SecurityPointers>
               <Securities>
                       <Security CUSIP9="699438AJ7"/>
                       <Security CUSIP9="699438AK4"/>
                       <Security CUSIP9="699438AL2"/>
                       <Security CUSIP9="699438AM0"/>
                       <Security CUSIP9="699438AN8"/>
                       <Security CUSIP9="699438AP3"/>
```

Document Message

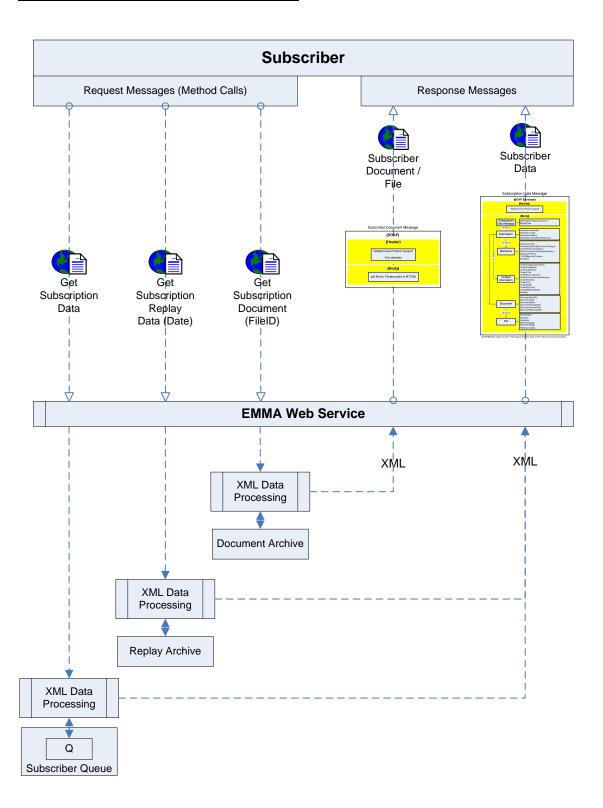
EVENT FILING

Data Message

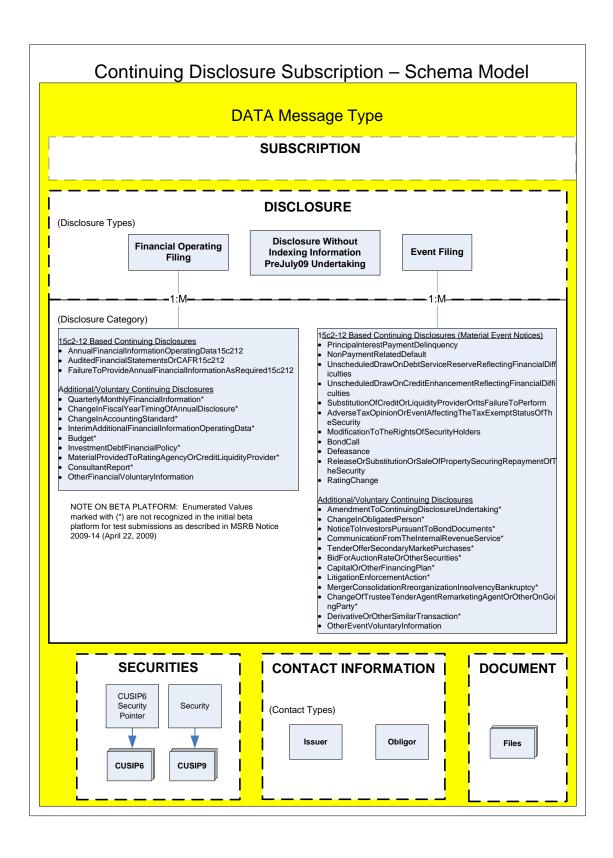
```
<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
xsi:schemaLocation="EMMA-SUBMISSION-XML
C:\EMMA\EMMA_B2B\Schema\ContinuingDisclosure\Submission\EMMA_ContinuingDisclosure_SUBMISSION_DataMessage_Schema_v5.xsd">
       <Submission SubmissionStatus="Publish" />
       <DisclosureIndexingData>
               <Disclosure DisclosureType="EventBasedDisclosure" EventDisclosureCategory="BondCall">
                       <DisclosurePeriod AsOfDate="2008-06-30"/>
               </Disclosure>
               <Disclosure DisclosureType="EventBasedDisclosure" EventDisclosureCategory="Defeasance">
                       <DisclosurePeriod AsOfDate="2008-06-30"/>
               </Disclosure>
               <CUSIP6SecurityPointers>
                       < CUSIP6SecurityPointer CUSIP6="617481"/>
                       < CUSIP6SecurityPointer CUSIP6="61748P"/>
                       < CUSIP6SecurityPointer CUSIP6="61748T"/>
                       < CUSIP6SecurityPointer CUSIP6="617487"/>
                       < CUSIP6SecurityPointer CUSIP6="617493"/>
                       < CUSIP6SecurityPointer CUSIP6="617496"/>
                       <CUSIP6SecurityPointer CUSIP6="617508"/>
                       < CUSIP6SecurityPointer CUSIP6="617524"/>
               </CUSIP6SecurityPointers>
               <Securities>
                       <Security CUSIP9="699438AJ7"/>
                       <Security CUSIP9="699438AK4"/>
                       <Security CUSIP9="699438AL2"/>
                       <Security CUSIP9="699438AM0"/>
                       <Security CUSIP9="699438AN8"/>
                       <Security CUSIP9="699438AP3"/>
                       <Security CUSIP9="699438BD9"/>
               </Securities>
        </DisclosureIndexingData>
       <ContactInformation ContactType="Issuer" ContactOrganizationName="Organization" ContactFirstName="ContactFirstName"
               ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL" ContactZipCode="55555"
```

Document Message

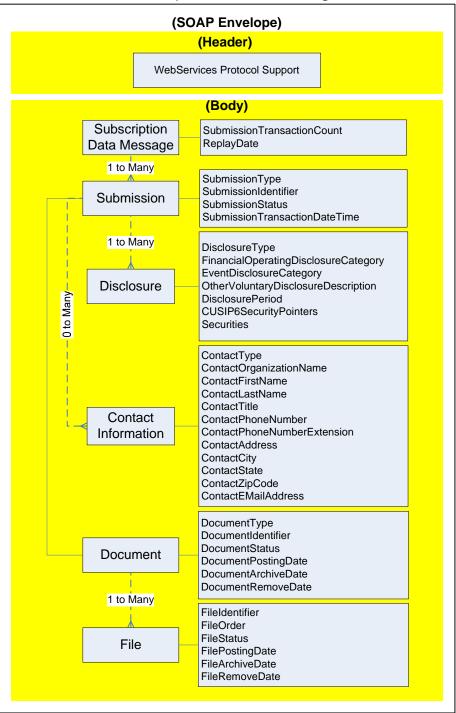
MESSAGE PROCESSING OVERVIEW



DATA MESSAGE & TYPE DEFINITION SCHEMAS



Subscription Data Message



SOAP (Simple Object Access Protocol) - foundation layer of the web services protocol stack

XML MESSSAGE SCHEMAS

Detailed below are three (3) schemas; Data, Document, and a common Type Definition schema that is included in each of the Data and Document schemas by reference. The Data and Document schemas describe the base structural containers which in turn reference child-level containers and specifications described in the Type Definition schema. The schemas are universally applicable to Data and Document Messages for Continuing Disclosure submissions.

Data Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBSCRIPTION-XML" targetNamespace="EMMA-SUBSCRIPTION-XML" t
elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
                    <xs:include schemaLocation="..."/>
                     <xs:element name="ContinuingDisclosureSubscriptionDataMessage" type="ContinuingDisclosureSubscriptionDataMessageType"/>
                     <!-- Type Definition starts -->
                     <xs:complexType name="ContinuingDisclosureSubscriptionDataMessageType">
                                         <xs:sequence>
                                                              <xs:element name="ContinuingDisclosureSubmission" type="ContinuingDisclosureSubmissionDetailsType" maxOccurs="unbounded"/>
                                         </r></xs:sequence>
                                         <xs:attribute name="SubmissionTransactionCount" type="xs:integer"/>
                                         <xs:attribute name="ReplayDate" type="ISODate"/>
                    </xs:complexType>
                    <xs:complexType name="ContinuingDisclosureSubmissionDetailsType">
                                         <xs:sequence>
                                                              <xs:element name="DisclosureIndexingData" type="DisclosureIndexingDataDetailsType" minOccurs="1" maxOccurs="1"/>
                                                              <xs:element name="ContactInformation" type="ContactInformationType" minOccurs="0" maxOccurs="unbounded"/>
                                                              <xs:element name="Document" type="DocumentDetailsType" minOccurs="0" maxOccurs="1"/>
                                        </xs:sequence>
                                         <xs:attribute name="SubmissionIdentifier" type="Max25Text" use="required"/>
                                         <xs:attribute name="SubmissionStatus" type="SubmissionStatusType"/>
                                         <xs:attribute name="SubmissionTransactionDateTime" type="ISODateTime"/>
                    </xs:complexType>
</xs:schema>
```

Document Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBSCRIPTION-XML" targetNamespace="EMMA-SUBSCRIPTION-XML"
elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
        <!-- Type Definition starts -->
        <xs:complexType name="DisclosureIndexingDataDetailsType">
                <xs:sequence>
                        <xs:element name="Disclosure" type="DisclosureDetailsType" maxOccurs="unbounded"/>
                        <xs:element name="Securities" type="SecuritiesDetailsType"/>
                </xs:sequence>
        </xs:complexType>
        <xs:complexType name="DisclosureDetailsType">
                <xs:sequence>
                        <xs:element name="DisclosurePeriod" type="DisclosurePeriodType" minOccurs="0" maxOccurs="1" />
                </xs:sequence>
                <xs:attribute name="DisclosureType" type="DisclosureTypes"/>
                <xs:attribute name="FinancialOperatingDisclosureCategory" type="FinancialOperatingDisclosureCategoryType"/>
                <xs:attribute name="EventDisclosureCategory" type="EventDisclosureCategoryType"/>
                <xs:attribute name="OtherVoluntaryDisclosureDescription" type="Max140Text"/>
```

```
</xs:complexType>
<xs:complexType name="DisclosurePeriodType">
        <xs:attribute name="PeriodType" type="PeriodDetailsType"/>
        <xs:attribute name="AsOfDate" type="ISODate"/>
        <xs:attribute name="BeginningDate" type="ISODate"/>
        <xs:attribute name="EndingDate" type="ISODate"/>
</xs:complexType>
<xs:complexType name="SecuritiesDetailsType">
       <xs:sequence>
                <xs:element name="Security" type="SecurityDetailsType" maxOccurs="unbounded"/>
        </xs:sequence>
</xs:complexType>
<xs:complexType name="SecurityDetailsType">
       <xs:attribute name="CUSIP9" type="Cusip9Type"/>
</xs:complexType>
<xs:complexType name="DocumentDetailsType">
        <xs:sequence>
                <xs:element name="UnderlyingFiles" type="UnderlyingFilesType" maxOccurs="unbounded"/>
        </xs:sequence>
        <xs:attribute name="DocumentIdentifier" type="Max25Text"/>
        <xs:attribute name="DocumentStatus" type="DocumentStatusType"/>
        <xs:attribute name="DocumentPostingDate" type="ISODate"/>
        <xs:attribute name="DocumentArchiveDate" type="ISODate"/>
        <xs:attribute name="DocumentRemoveDate" type="ISODate"/>
</xs:complexType>
<xs:complexType name="UnderlyingFilesType">
        <xs:sequence>
                <xs:element name="File" type="FileDetailsType" maxOccurs="1"/>
       </xs:sequence>
</xs:complexType>
<xs:complexType name="FileDetailsType">
        <xs:attribute name="FileIdentifier" type="Max25Text"/>
        <xs:attribute name="FileStatus" type="DocumentStatusType"/>
        <xs:attribute name="FileOrder" type="xs:integer"/>
        <xs:attribute name="FilePostingDate" type="ISODate"/>
        <xs:attribute name="FileArchiveDate" type="ISODate"/>
        <xs:attribute name="FileRemoveDate" type="ISODate"/>
</xs:complexType>
```

```
<xs:complexType name="ContactInformationType">
        <xs:attribute name="ContactType" type="ContactTypeDetails"/>
        <xs:attribute name="ContactOrganizationName" type="Max140Text"/>
        <xs:attribute name="ContactFirstName" type="Max25Text"/>
        <xs:attribute name="ContactLastName" type="Max25Text"/>
        <xs:attribute name="ContactPhoneNumber" type="Max15Text"/>
        <xs:attribute name="ContactPhoneNumberExtension" type="Max6Text"/>
        <xs:attribute name="ContactAddress" type="Max140Text"/>
        <xs:attribute name="ContactCity" type="Max25Text"/>
        <xs:attribute name="ContactState" type="StateCode"/>
        <xs:attribute name="ContactZipCode" type="Max15Text"/>
        <xs:attribute name="ContactEMailAddress" type="Max50Text"/>
</xs:complexType>
<xs:simpleType name="PeriodDetailsType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="YearEnded"/>
                <xs:enumeration value="OuarterEnded"/>
                <xs:enumeration value="MonthBeginning"/>
                <xs:enumeration value="OtherPeriodBeginning"/>
        </ri>
</r></rs:simpleType>
<xs:simpleType name="ContactTypeDetails">
        <xs:restriction base="xs:string">
                <xs:enumeration value="Issuer"/>
                <xs:enumeration value="Obligor"/>
                <xs:enumeration value="Submitter"/>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="SubmissionStatusType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="Publish"/>
        </r></restriction>
</xs:simpleType>
<xs:simpleType name="DisclosureTypes">
        <xs:restriction base="xs:string">
                <xs:enumeration value="FinancialOperatingDataDisclosure"/>
                <xs:enumeration value="EventBasedDisclosure"/>
                <xs:enumeration value="DisclosureWithoutIndexingInformationPreJuly09Undertaking"/>
```

```
</r></restriction>
</xs:simpleType>
<xs:simpleType name="FinancialOperatingDisclosureCategoryType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="AnnualFinancialInformationOperatingData15c212"/>
                <xs:enumeration value="AuditedFinancialStatementsOrCAFR15c212"/>
                <xs:enumeration value="FailureToProvideAnnualFinancialInformationAsRequired15c212"/>
                <xs:enumeration value="QuarterlyMonthlyFinancialInformation"/>
                <xs:enumeration value="ChangeInFiscalYearTimingOfAnnualDisclosure"/>
                <xs:enumeration value="ChangeInAccountingStandard"/>
                <xs:enumeration value="InterimAdditionalFinancialInformationOperatingData"/>
                <xs:enumeration value="Budget"/>
                <xs:enumeration value="InvestmentDebtFinancialPolicy"/>
                <xs:enumeration value="MaterialProvidedToRatingAgencyOrCreditLiquidityProvider"/>
                <xs:enumeration value="ConsultantReport"/>
                <xs:enumeration value="OtherFinancialVoluntaryInformation"/>
        </r></restriction>
</xs:simpleType>
<xs:simpleType name="EventDisclosureCategoryType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="PrincipalnterestPaymentDelinquency"/>
                <xs:enumeration value="NonPaymentRelatedDefault"/>
                <xs:enumeration value="UnscheduledDrawOnDebtServiceReserveReflectingFinancialDifficulties"/>
                <xs:enumeration value="UnscheduledDrawOnCreditEnhancementReflectingFinancialDifficulties"/>
                <xs:enumeration value="SubstitutionOfCreditOrLiquidityProviderOrItsFailureToPerform"/>
                <xs:enumeration value="AdverseTaxOpinionOrEventAffectingTheTaxExemptStatusOfTheSecurity"/>
                <xs:enumeration value="ModificationToTheRightsOfSecurityHolders"/>
                <xs:enumeration value="BondCall"/>
                <xs:enumeration value="Defeasance"/>
                <xs:enumeration value="ReleaseOrSubstitutionOrSaleOfPropertySecuringRepaymentOfTheSecurity"/>
                <xs:enumeration value="RatingChange"/>
                <xs:enumeration value="AmendmentToContinuingDisclosureUndertaking"/>
                <xs:enumeration value="ChangeInObligatedPerson"/>
                <xs:enumeration value="NoticeToInvestorsPursuantToBondDocuments"/>
                <xs:enumeration value="CommunicationFromTheInternalRevenueService"/>
                <xs:enumeration value="TenderOfferSecondaryMarketPurchases"/>
                <xs:enumeration value="BidForAuctionRateOrOtherSecurities"/>
                <xs:enumeration value="CapitalOrOtherFinancingPlan"/>
```

```
<xs:enumeration value="LitigationEnforcementAction"/>
                <xs:enumeration value="MergerConsolidationRreorganizationInsolvencyBankruptcy"/>
                <xs:enumeration value="ChangeOfTrusteeTenderAgentRemarketingAgentOrOtherOnGoingParty"/>
                <xs:enumeration value="DerivativeOrOtherSimilarTransaction"/>
                <xs:enumeration value="OtherEventVoluntaryInformation"/>
        </ri>
</r></rs:simpleType>
<xs:simpleType name="DocumentStatusType">
        <xs:restriction base="xs:string">
                <xs:enumeration value="Current"/>
                <xs:enumeration value="Archived"/>
                <xs:enumeration value="Removed"/>
        </r></xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip9Type">
        <xs:restriction base="xs:string">
                <xs:minLength value="9"/>
                <xs:maxLength value="9"/>
        </ri>
</r></rs:simpleType>
<xs:simpleType name="StateCode">
        <xs:restriction base="xs:string">
                <xs:pattern value="[A-Z]{2,2}"/>
        </xs:restriction>
</r></rs:simpleType>
<xs:simpleType name="ISODate">
        <xs:restriction base="xs:date"/>
</xs:simpleType>
<xs:simpleType name="ISODateTime">
        <xs:restriction base="xs:dateTime"/>
</xs:simpleType>
<xs:simpleType name="Max140Text">
        <xs:restriction base="xs:string">
                <xs:minLength value="1"/>
                <xs:maxLength value="140"/>
        </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max75Text">
```

```
<xs:restriction base="xs:string">
                      <xs:minLength value="1"/>
                      <xs:maxLength value="75"/>
               </ri>
       </xs:simpleType>
       <xs:simpleType name="Max50Text">
              <xs:restriction base="xs:string">
                      <xs:minLength value="1"/>
                      <xs:maxLength value="50"/>
               </ri>
       </xs:simpleType>
       <xs:simpleType name="Max25Text">
              <xs:restriction base="xs:string">
                      <xs:minLength value="1"/>
                      <xs:maxLength value="25"/>
               </ri>
       </xs:simpleType>
       <xs:simpleType name="Max15Text">
              <xs:restriction base="xs:string">
                      <xs:minLength value="1"/>
                      <xs:maxLength value="15"/>
               </ri>
       </r></rs:simpleType>
       <xs:simpleType name="Max6Text">
              <xs:restriction base="xs:string">
                      <xs:minLength value="1"/>
                      <xs:maxLength value="6"/>
               </ri>
       </r></rr></rr>
       <!-- Type definition ends -->
</xs:schema>
```

SUBSCRIPTION-DATA TAG GLOSSARY

Set forth below is a glossary of all data tags to be used in EMMA's automated subscription interface for data and document messages. These data elements are organized in a hierarchical data relationship. This glossary sets out each data element's XML container, data tag, definition and data specifications, including a listing of enumerated values for those data elements where the submitter is to choose a value and an example of the data format where the submitter is to enter a value.

Subscription Data Tags Description and Specification

EMMA Continuing Disclosure Service

XML Container	Data Tag	Definition	Data Specification
Submission	Submission Identifier	Unique identifier assigned by EMMA at time of initiation of data submission (the initial submission event) and used by the submitter in connection with subsequent submission events, including document submission	Max25Text ex: S212345678910
	Submission Status	Indicates the intention to publish the information in the EMMA public portal or to submit as test submission – test submissions are not disseminated	Enumerated Value: • Publish

XML Container	Data Tag	Definition	Data Specification
Disclosure	Disclosure Type	Indicates the type of continuing disclosure filing as follows: Financial Operating Filing - Submit annual financial information under SEC Rule 15c2-12(b)(5)(i)(A) and (d)(2)(ii)(A), audited financial statements under Rule 15c2-12(b)(5)(i)(B), notice of failure to provide annual financial information under Rule 15c2-12(b)(5)(i)(D), and other voluntary financial or operating information. Fevent Filing - Submit notice of a material event specified under SEC Rule 15c2-12(b)(5)(C) and (d)(2)(ii)(B), and any other event-based voluntary notice or disclosure with respect to municipal securities. DisclosureWithoutIndexingInformationPreJuly09Undertaking - This continuing disclosure document is being submitted without indexing information in connection with securities subject to a continuing disclosure undertaking entered into prior to July 1, 2009. Unindexed continuing disclosure documents will be posted on the EMMA Portal without indexing information, but accompanied by the submitter's contact information, and also will be disseminated to EMMA's continuing disclosure subscribers together with the submitter's contact information. Filing without indexing information is strongly discouraged - Failure to provide indexing information will dramatically impact the effectiveness of your disclosure to the determent of investors in your securities.	 Enumerated Value: FinancialOperatingDataDisclosure EventBasedDisclosure DisclosureWithoutIndexingInformationPreJuly09Undertaking

XML Container	Data Tag	Definition	Data Specification
Disclosure	Financial Operating Disclosure Category	Indicates the financial operating disclosure category to which the filing applies. One or more categories may apply to a single filing NOTE ON BETA PLATFORM: Enumerated Values marked with (*) are not recognized in the initial beta platform for test submissions as described in MSRB Notice 2009-14 (April 22, 2009)	 Enumerated Value: AnnualFinancialInformationOperatingData15c212 AuditedFinancialStatementsOrCAFR15c212 FailureToProvideAnnualFinancialInformationAsRequired 15c212 QuarterlyMonthlyFinancialInformation* ChangeInFiscalYearTimingOfAnnualDisclosure* ChangeInAccountingStandard* InterimAdditionalFinancialInformationOperatingData* Budget* InvestmentDebtFinancialPolicy* MaterialProvidedToRatingAgencyOrCreditLiquidityProvi der* ConsultantReport* OtherFinancialVoluntaryInformation

XML Container	Data Tag	Definition	Data Specification
Disclosure	Event Disclosure Category	Indicates the event-based disclosure categories to which the filing applies. One or more categories may apply to a single filing ex: a filing may include a notice of Bond Call and Defeasance NOTE ON BETA PLATFORM: Enumerated Values marked with (*) are not recognized in the initial beta platform for test submissions as described in MSRB Notice 2009-14 (April 22, 2009)	Enumerated Value: PrincipalnterestPaymentDelinquency NonPaymentRelatedDefault UnscheduledDrawOnDebtServiceReserveReflectingFin ancialDifficulties UnscheduledDrawOnCreditEnhancementReflectingFina ncialDifficulties SubstitutionOfCreditOrLiquidityProviderOrltsFailureToP erform AdverseTaxOpinionOrEventAffectingTheTaxExemptStat usOfTheSecurity ModificationToTheRightsOfSecurityHolders BondCall Defeasance ReleaseOrSubstitutionOrSaleOfPropertySecuringRepay mentOfTheSecurity RatingChange AmendmentToContinuingDisclosureUndertaking* ChangeInObligatedPerson* NoticeToInvestorsPursuantToBondDocuments* CommunicationFromTheInternalRevenueService* TenderOfferSecondaryMarketPurchases* BidForAuctionRateOrOtherSecurities* CapitalOrOtherFinancingPlan* LitigationEnforcementAction* MergerConsolidationRreorganizationInsolvencyBankrup tcy* ChangeOfTrusteeTenderAgentRemarketingAgentOrOth erOnGoingParty* DerivativeOrOtherSimilarTransaction* OtherEventVoluntaryInformation
	Other Voluntary Disclosure Description	Indicates the description of a voluntary disclosure filing for Financial Operating Disclosure or Event Disclosure	Max140Text ex: Description of other voluntary disclosure

XML Container	Data Tag	Definition	Data Specification
	Period Type	For Financial Operating Filings, is used to indicate if the type of period covered by the filing. The period type is used in combination with Disclosure Period ex. PeriodType < YearEnded> < EndingDate, 2008-12-31> NOTE ON BETA PLATFORM: The initial beta platform selections for this element differ and instead include 'fiscal year', 'calendar year' and 'quarterly'. Test submissions made to the beta platform should use these alternative elements.	Enumerated Value: • YearEnded • QuarterEnded • MonthBeginning • OtherPeriodBeginning
Disclosure	Disclosure Period	For Financial Operating Filings, used in conjunction with Period Type to indicate the applicable beginning and/or end date(s) For Event Filings, used without Period Type to indicate as of date of submitted document if other than the actual date of submission ex: Financial Operating Filing – Audited Financial Statements or CAFR (Rule 15c2-12) – PeriodType <otherperiodbeginning> <beginning 2009-06-31="" date,=""> <ending 2009-12-31="" date,=""> ex: Event Filing – Bond Call <asofdate, 2009-12-31=""> NOTE ON BETA PLATFORM: The initial beta platform selections for this element differ and instead include 'from date', 'to date' and 'end as of date'. Test submissions made to the beta platform should use these alternative elements.</asofdate,></ending></beginning></otherperiodbeginning>	Attributes: • Period Type (see enumerated values above) • AsOfDate (ISODate) ex: 2009-06-31 • BeginningDate (ISODate) ex: 2009-09-30 • EndingDate (ISODate) ex: 2009-12-31
	CUSIP6 Security Pointers	Indicates the six-digit CUSIP6 number(s) to which the disclosure applies if a disclosure applies to ALL securities under that CUSIP6.	String{Min6,Max6} ex: 123456
	Securities	Indicates the nine-digit CUSIP number(s) to which the disclosure applies NOTE: B2B submissions are not available for ineligible for CUSIP number assignment filings	String{Min9,Max9} ex: 123456AB7
	Document Identifier	EMMA-assigned unique identifier for a document of specific document type	Max25Text

XML Container	Data Tag	Definition	Data Specification
Document	Document Status	Indication of the active state of a document consisting of current and archived	Enumerated Value: • Current • Archived • Removed
Document	Document Posting Date	The date the document was posted to the public on EMMA	CCYY-MM-DD ex: 2008-12-08
	Document Archive Date	The date the document was moved to the EMMA archive	CCYY-MM-DD ex: 2008-12-08
	Document Remove Date	The date the document was removed from a submission on the EMMA continuing market disclosure service	CCYY-MM-DD ex: 2008-12-08
	File Identifier	EMMA-assigned unique identifier for electronic file(s) constituting the submitted document	Max25Text ex: MS223986-1
	File Order	If a document consists of more than one electronic file, provides file sequence information	Integer ex: 24
File	File Status	Indication of the active state of a file consisting of current and archived	Enumerated Value: Current Archived Removed
	File Posting Date	The date the file was posted to the public on EMMA	CCYY-MM-DD ex: 2008-12-08
	File Archive Date	The date the file was moved to the EMMA archive	CCYY-MM-DD ex: 2008-12-08
	File Remove Date	The date the file was removed from a submission on the EMMA continuing market disclosure service	CCYY-MM-DD ex: 2008-12-08
Contact Information	Contact Type	Indicates organization type of contact that the public should contact with questions about the submitted disclosure	Enumerated Value:IssuerObligorSubmitter
	Contact Organization Name	Full name of the contact organization that the public should contact with questions about the submitted disclosure	Max140Text ex: MuniBond Dealer
	Contact First Name	The first name of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Emma

XML Container	Data Tag	Definition	Data Specification
	Contact Last Name	The last name of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Jones
	Contact Title	The title of the contact person that the public should contact with questions about the submitted disclosure	Max140Text ex: Senior Vice President
	Contact Phone Number	The phone number of the contact person that the public should contact with questions about the submitted disclosure	Max15Text ex: 703-555-2222
Contact Information	Contact Phone Number Extension	The extension of the phone number (if any) of the contact person that the public should contact with questions about the submitted disclosure	Max6Text ex: 1235
	Contact Address	The street address or post office box of the contact person that the public should contact with questions about the submitted disclosure	Max140Text ex: 123 Security Road
	Contact City	The address city of the contact person that the public should contact with questions about the submitted disclosure	Max25Text ex: Alexandria
	Contact State	The address state of the contact person that the public should contact with questions about the submitted disclosure	String;StateCode;2 ex: VA
	Contact Zip Code	The address zip code of the contact person that the public should contact with questions about the submitted disclosure	Max15Text ex: 22301-5555
	Contact Email Address	The email address of the contact person that the public should contact with questions about the submitted disclosure	Max50Text ex: issuer@issuer.com

MA Continuing Disclosure Subscription Service Specifications

SUBSCRIPTION SAMPLE XML MESSAGES

FINANCIAL OPERATING DATA DISCLOSURE

```
<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureSubscriptionDataMessage xmlns="EMMA-SUBSCRIPTION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="...">
       <ContinuingDisclosureSubmission SubmissionIdentifier="1300" SubmissionStatus="Publish"</p>
               SubmissionTransactionDateTime="2008-03-20T00:00:00">
               <DisclosureIndexingData>
                       <Disclosure DisclosureType="FinancialOperatingDataDisclosure"</p>
                               FinancialOperatingDisclosureCategory="AnnualFinancialInformationOperatingData15c212">
                               <DisclosurePeriod PeriodType="OtherPeriodBeginning" BeginningDate="2008-06-30" EndingDate="2008-06-30"/>
                       </Disclosure>
                       <Disclosure DisclosureType="FinancialOperatingDataDisclosure"</p>
                               FinancialOperatingDisclosureCategory="ChangeInAccountingStandard">
                                <DisclosurePeriod AsOfDate="2008-07-01"/>
                       </Disclosure>
                       <Securities>
                                <Security CUSIP9="617481LX1"/>
                                <Security CUSIP9="617481LY2"/>
                                <Security CUSIP9="617481MG3"/>
                                <Security CUSIP9="617481MH4"/>
                                <Security CUSIP9="617481MC5"/>
                                <Security CUSIP9="617481ME6"/>
                                <Security CUSIP9="617481LT7"/>
                                <Security CUSIP9="699438AJ1"/>
                                <Security CUSIP9="699438AK2"/>
                                <Security CUSIP9="699438AL3"/>
                                <Security CUSIP9="699438AM4"/>
                                <Security CUSIP9="699438AN5"/>
                                <Security CUSIP9="699438AP6"/>
                                <Security CUSIP9="699438BD7"/>
                       </Securities>
               </DisclosureIndexingData>
               <ContactInformation ContactType="Issuer" ContactOrganizationName="Organization" ContactFirstName="ContactFirstName"
                       ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL" ContactZipCode="55555"
                       ContactPhoneNumber="555-55-555" ContactEMailAddress="123@mail.com"/>
```

EVENT-BASED DISCLOSURE

```
<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
         <Submission SubmissionStatus="Publish" />
          <DisclosureIndexingData>
                <Disclosure DisclosureType="EventBasedDisclosure" EventDisclosureCategory="BondCall">
                        <DisclosurePeriod AsOfDate="2008-06-30"/>
               </Disclosure>
                <Disclosure DisclosureType="EventBasedDisclosure" EventDisclosureCategory="Defeasance">
                        <DisclosurePeriod AsOfDate="2008-06-30"/>
               </Disclosure>
                <CUSIP6SecurityPointers>
                        < CUSIP6SecurityPointer CUSIP6="617481"/>
                        < CUSIP6SecurityPointer CUSIP6="61748P"/>
                        < CUSIP6SecurityPointer CUSIP6="61748T"/>
                        < CUSIP6SecurityPointer CUSIP6="617487"/>
                        < CUSIP6SecurityPointer CUSIP6="617493"/>
                        < CUSIP6SecurityPointer CUSIP6="617496"/>
                        < CUSIP6SecurityPointer CUSIP6="617508"/>
                        < CUSIP6SecurityPointer CUSIP6="617524"/>
               </CUSIP6SecurityPointers>
                <Securities>
```

```
<Security CUSIP9="699438AJ7"/>
                       <Security CUSIP9="699438AK4"/>
                       <Security CUSIP9="699438AL2"/>
                       <Security CUSIP9="699438AM0"/>
                       <Security CUSIP9="699438AN8"/>
                       <Security CUSIP9="699438AP3"/>
                       <Security CUSIP9="699438BD9"/>
               </Securities>
         </DisclosureIndexingData>
         <ContactInformation ContactType="Issuer" ContactOrganizationName="Organization" ContactFirstName="ContactFirstName"
                                         ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL"
                                         ContactZipCode="55555" ContactPhoneNumber="555-55-555" ContactEMailAddress="Issuer@mail.com"/>
         <ContactInformation ContactType="Obligor" ContactOrganizationName="Organization" ContactFirstName="ContactFirstName"
                                         ContactLastName="ContactLastname" ContactAddress="Address" ContactCity="City" ContactState="AL"
                                         ContactZipCode="55555" ContactPhoneNumber="555-55-5555" ContactEMailAddress="Obligor@mail.com"/>
</ContinuingDisclosureMessage>
```