



Department of Local Government,
Industry Regulation and Safety



Health and Hygiene Sampling Bulk Lodgement

Preparing an XML Bulk Upload file

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1 Glossary

Term / Acronym	Meaning
LGIRS	Department of Local Government, Industry Regulation and Safety
OSH	Occupational Safety and Health
SRS	Safety Regulation System
WHSA	<i>Work Health and Safety Act 2020</i>
WHS(M)R	Work Health and Safety (Mines) Regulations 2022
XML	eXtensible Markup Language. A text-based file format used to store and transport data

2 Introduction

The Department of Local Government, Industry Regulation and Safety (LGIRS) has developed functionality within the Safety Regulation System (SRS) to allow atmospheric, biological and noise dosimetry samples to be submitted in bulk. This can be done by using either an XML file or an Excel template provided by the department.

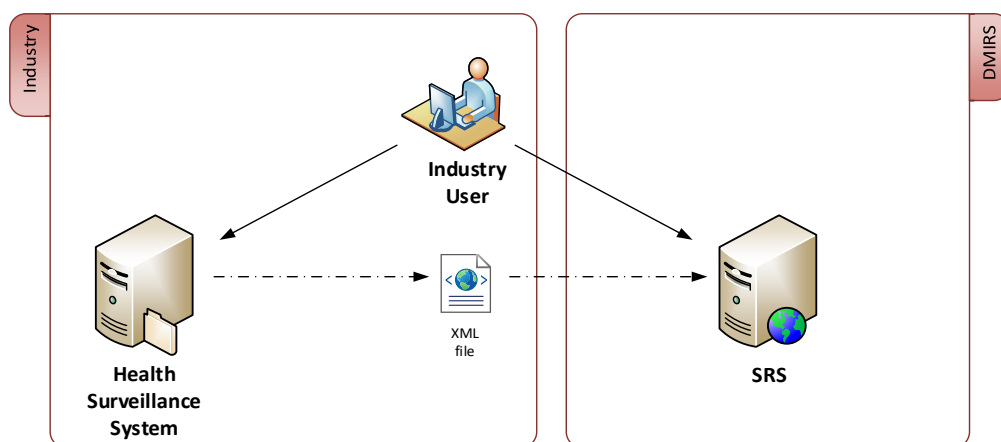
This document details the XML file schema used by the department and provides examples of files for atmospheric, biological and noise dosimetry samples.

To learn about the Excel template that can be used in place of the XML file, refer to [Appendix C - Using the Excel template for bulk upload](#).

To learn how to submit the XML or Excel file to the department via the SRS bulk upload functionality, refer to [Appendix D - Accessing and uploading data into SRS](#).

3 High Level End to End Process

This process requires an XML export from an organisation's current health surveillance system to an XML format (schema provided, see [Appendix A - XML file schema](#)). Once exported, this XML can be submitted to the department via the SRS bulk upload functionality.



3.1 Systems

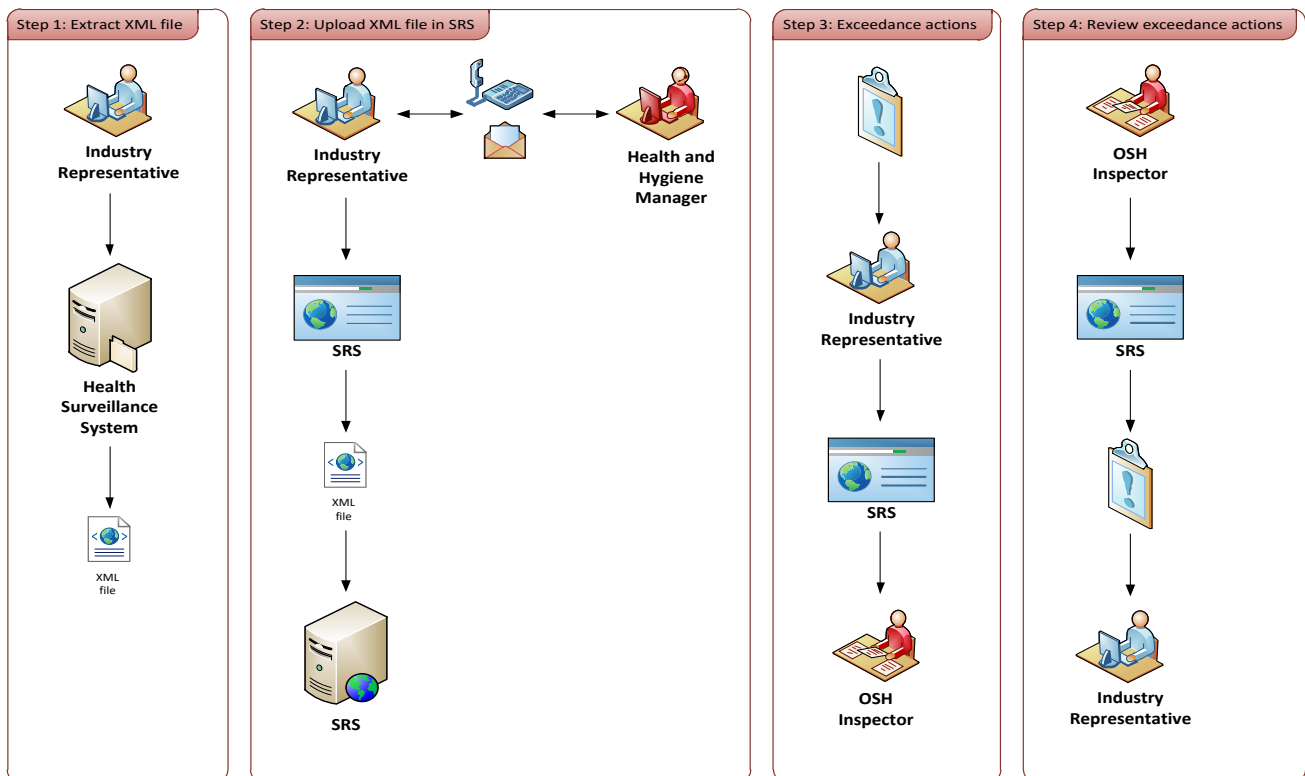
There are two systems involved in the end to end process of transferring sampling information from each company to the department:

- 1) Industry Party's Health Surveillance System; and
- 2) SRS.

3.2 Roles and activities

There are two primary roles and one secondary supporting role involved in the end to end process of transferring sampling information from Industry to the department. Each role completes different tasks in the overall process of preparing data in an XML file to importing to SRS through to addressing any exceedances:

- 1) Industry Representative: Prepares and imports an XML file of data to SRS.
- 2) The department's Health and Hygiene Manager: Available to assist with data upload to SRS.
- 3) The department's OSH Inspector: Reviews any exceedances within SRS.



- 1) The Industry Representative enters the required data into their health surveillance system and subsequently generates an XML file.
- 2) The Industry Representative logs into SRS and uploads the XML file. The Health and Hygiene Manager will be available if there are any questions.
- 3) If there are any samples submitted via the bulk upload that have any exceedances, the Industry Representative is required to enter further information into SRS.
- 4) The exceedance action details are reviewed by the OSH Inspector who can seek further information from the Industry Representative. This leads to a repeat of steps 3 and 4 until the OSH Inspector accepts the exceedance action details.

4 Preparing an XML file for upload

For details on how to prepare an XML file to bulk upload data into SRS, refer to [Appendix A - XML file schema](#). File schema details and examples are included to assist with this process.

5 Reference codes required for XML and Excel files

Both the XML and Excel files require reference codes to be used for equipment, location, occupation, agents, sample timing and personal protective equipment (PPE). Refer to [Appendix B - Reference codes required for XML and Excel files](#) for the latest list.

6 Using the Excel template for bulk upload

For details on how to use the Excel template to bulk upload data into SRS, refer to [Appendix C - Using the Excel template for bulk upload](#).

7 Accessing and uploading data into SRS

Appropriate security access is required to access the bulk lodgement functionality within SRS. For details on the required access and how it may be obtained, plus instructions on how to navigate through the steps to upload your XML file to SRS, refer to [Appendix D - Accessing and uploading data into SRS](#).

8 Further Information

Further information can be found by accessing the [department's website](#).

Alternatively, you can contact the SRS Manager via the following details:

Contact: Hygiene Manager

Address: Lvl 2, 1 Adelaide Tce, East Perth, WA 6004

Postal Address: Mineral House, 100 Plain Street, East Perth, WA 6004

Telephone: (08) 9358 8001 (option 2)

Email: SRSHygieneManager@demirs.wa.gov.au

APPENDICES

i. Appendix A - XML file schema

This section contains the specification of the schema that will be uploaded via SRS. The one XML file can be used to upload atmospheric, biological and noise samples, however there are differences in the information required for each type. Alternatively, it is also possible to submit separate files for the different sampling methods.

1 Structure

Sample Record

Sample Record Id

Operation

Type

Company

Site

Registered Sampler

Sample Collection

Current HHMP

SEGID

InvestigativeSample

Employee

Shift

Sample Results

Sample Result

Exceedance Declaration

2 Definition

The technical requirements for each object in the schema are detailed below.

2.1 Current

The codes below are all current as of 26th March 2024. Refer to 2.2 - Obsolete tags that have been removed.

Type	Field	Description/Detail	
Sample Record	Id	Description	Unique defined sample Id provided by Industry
		Mandatory	Yes
		Type	String
		Format	Max length 120
		Validation	An error will be displayed if the Sample Id has already been used or is duplicated in the file
Operation	Type	Description	Type of operation activity the person sampled was involved in.
		Mandatory	Yes
		Type	Operation
		Format	
		Validation	Allowable values: MiningOperation ExplorationOperation *Please note: MiningOperation should be set unless sampling is conducted on people involved with exploration drilling, in which case ExplorationOperation should be set.
Company	CODE	Description	Company Code - Unique string allocated by the department to identify the company operating the site or, for an exploratory drilling project, the exploration company responsible.
		Mandatory	Yes
		Type	String
		Format	Company Code - O\d{5}
		Validation	*Please note: The format for the Company Code may lengthen in future.
Company	Name	Description	Company Name which identifies the company operating the site or, for an exploratory drilling project, the exploration company responsible.
		Mandatory	Yes
		Type	String

Type	Field	Description/Detail	
		Format	Max length 60
		Validation	
Site	Code	Description	Unique Site code allocated by the department to identify the site where sampling is carried out on.
		Mandatory	Yes if Operation is MiningOperation
		Type	String
		Format	SG\d{7}
		Validation	*Please note: the format for the Site Code may lengthen in future.
Site	Name	Description	Name of site
		Mandatory	Yes if Operation is MiningOperation
		Type	String
		Format	Max length 60
		Validation	
Registered Sampler	Registration	Description	Unique Id assigned to an approved Registered Sampler or Noise Officer by the department.
		Mandatory	Mandatory for atmospheric and noise dosimetry samples. Not required for biological samples
		Type	String
		Format	Max length 30
		Validation	Registration is current at sampling date. If the agents in the sample record are for atmospheric samples then the registration details must be for a Registered Sampler. If the agents in the sample record are for noise dosimetry samples then the registration details must be for a Certified Noise Officer. Registration Samplers are not required for biological samples.
Registered Sampler	Surname	Description	Surname of the Registered Sampler
		Mandatory	Mandatory for atmospheric and noise dosimetry samples. Not required for biological samples
		Type	String
		Format	Max length 30
		Validation	
		Description	Given name of the Registered Sampler

Type	Field	Description/Detail	
Registered Sampler	GivenName	Mandatory	Mandatory for atmospheric and noise dosimetry samples. Not required for biological samples
		Type	String
		Format	Max length 30
		Validation	
Sample Collection	Date	Description	Date the sample was taken
		Mandatory	Yes
		Type	Date
		Format	xs:date
		Validation	
Sample Collection	CurrentHHMP	Description	If the site had a Health Management Plan (HMP) in SRS at the time the sample was taken then enter its reference ID
		Mandatory	No
		Type	String
		Format	HHMP-Id{6}
		Validation	
Sample Collection	SEGID	Description	The Similar Exposure Group (SEG) ID related to the sampled person
		Mandatory	No
		Type	String
		Format	
		Validation	
Sample Collection	InvestigativeSample	Description	Indicate whether the sample was taken in an investigative capacity or not
		Mandatory	No
		Type	Boolean
		Format	
		Validation	Allowable Values: true false The value must be false if a SEGID has been provided
Sample Collection	EquipmentCode	Description	Sampling equipment used
		Mandatory	Mandatory for atmospheric samples. Not required for biological and noise dosimetry samples
		Type	String

Type	Field	Description/Detail	
		Format	Max length 4
		Validation	Allowable values: See Appendix D for Equipment codes
Sample Collection	LocationCode	Description	The location where most of the exposure occurred during sampling
		Mandatory	Yes
		Type	String
		Format	Max length 3
		Validation	Allowable Values: See Appendix D for Location codes
Employee	Surname	Description	Surname of the person sampled
		Mandatory	Yes
		Type	String
		Format	Max length 30
		Validation	
Employee	GivenName	Description	Given Name of the person sampled
		Mandatory	Yes
		Type	String
		Format	Max length 30
		Validation	
Employee	DateOfBirth	Description	Date of Birth of the person sampled
		Mandatory	Yes
		Type	Date
		Format	xs:date
		Validation	
Employee	Gender	Description	Gender of the person sampled
		Mandatory	Yes
		Type	String
		Format	
		Validation	Allowable Values: Female Male
Employee	OccupationCode	Description	Occupation code of the person sampled
		Mandatory	Yes
		Type	String
		Format	Max length 6

Type	Field	Description/Detail	
		Validation	Allowable Values: See Appendix D for Occupation Codes
Employee	PPEType	Description	Type of personal protective equipment worn
		Mandatory	Mandatory for noise dosimetry samples. Not required for atmospheric and biological samples
		Type	String
		Format	
		Validation	Allowable Values: See Appendix D for PPE Type Codes
Employee	PPETypeOther	Description	The type of PPE worn that is not specified in the list of supplied values
		Mandatory	Mandatory if PPEType = OTHER
		Type	String
		Format	Max length 50
		Validation	
Employee	PPEClass	Description	The class rating of the PPE
		Mandatory	Mandatory for noise dosimetry samples. Not required for atmospheric and biological samples
		Type	Int
		Format	
		Validation	Allowable Values: See Appendix D for PPE Class Rating Codes
Shift	SampleTiming	Description	Timing of the sampled person's roster when the sample was taken eg Start of Shift
		Mandatory	Mandatory for biological samples. Not required for atmospheric and noise dosimetry samples
		Type	String
		Format	Max length 20
		Validation	Allowable Values: See Appendix D for Sample Timing Codes
Shift	Length	Description	Shift length of the person sampled – hours and minutes as decimal eg 7.5 for and seven and a half hour shift
		Mandatory	Mandatory for atmospheric and noise dosimetry samples. Not required for biological samples
		Type	Decimal

Type	Field	Description/Detail	
Shift	DaysOn	Format	(4,2)
		Validation	
		Description	Number of days on in the shift pattern of the person sampled
		Mandatory	Mandatory for atmospheric and noise dosimetry samples. Not required for biological samples
		Type	Int
Shift	DaysOff	Format	
		Validation	
		Description	Number of days off in the shift pattern of the person sampled
		Mandatory	Mandatory for atmospheric and noise dosimetry samples. Not required for biological samples
		Type	Int
Sample Result	ExposureType	Format	
		Validation	
		Description	Exposure type
		Mandatory	Mandatory for atmospheric samples. Not required for biological and noise dosimetry samples
		Type	String
Sample Result	ContaminantCode	Format	Max length 4
		Validation	Allowable Values: TWA PEAK STEL
		Description	Agent analysed
		Mandatory	Yes
		Type	String
Sample Result	BelowDetectionLimit	Format	Max length 50
		Validation	Allowable Values: See Appendix D for Agent Codes
		Description	Identifies if the concentration of the contaminant analysed is below the detection limit.
		Mandatory	Mandatory for atmospheric samples. Not required for noise dosimetry and biological samples

Type	Field	Description/Detail	
		Type	Boolean
		Format	
		Validation	Allowable Values: true false
Sample Result	Concentration	Description	Result of the agent sampled
		Mandatory	Yes
		Type	Decimal
		Format	(9,4)
		Validation	
Sample Result	UnitOfMeasure	Description	Unit of measurement
		Mandatory	Yes
		Type	String
		Format	Max length 20
		Validation	Allowable Values: See Appendix D for Unit of measurement based on contaminant code. A conversion formula is provided in Appendix D to convert airborne solvents and gases from mg/m3 to ppm.
Sample Result	AttenuationExpected	Description	Expected Attenuation based on the PPE worn
		Mandatory	Mandatory for noise samples. Not required for atmospheric and biological
		Type	Decimal
		Format	(9,2)
		Validation	
Exceedance Declaration	WasRiskInfoProvided	Description	For atmospheric: The worker has been provided with suitable and adequate information, training and instruction about the risks and controls associated with airborne contaminants [WHS s. 19(3) and WHS(M)R r. 39] For noise: The worker has been provided with suitable and adequate information, training and instruction about the risks and controls associated with noise hazards [WHS s. 19(3) and WHS(M)R r. 39]
		Mandatory	Not required for biological samples or if there is no exceedance of the exposure standard
		Type	Boolean

Type	Field	Description/Detail	
		Validation	Allowable Values: true false
Exceedance Declaration	WasPPESupplied	Description	For atmospheric: Effective respiratory protective devices were supplied to the worker [WHS(M)R rr. 36 and 44(3)] For noise: Effective hearing protective devices were supplied to the worker [WHS(M)R rr. 36 and 44(3)]
		Mandatory	Not required for biological samples or if there is no exceedance of the exposure standard
		Type	Boolean
		Validation	Allowable Values: true false
Exceedance Declaration	WasFitTested	Description	For atmospheric: The worker was provided with respiratory protection devices of a suitable size and fit that are reasonably comfortable for the person to wear, and appropriate information, training and instruction [WHS(M)R rr. 44(3) and 44(4)] For noise: The worker was provided with hearing protection devices of a suitable size and fit that are reasonably comfortable for the person to wear, and appropriate information, training and instruction [WHS(M)R rr. 44(3) and 44(4)]
		Mandatory	Not required for biological samples or if there is no exceedance of the exposure standard
		Type	Boolean
		Validation	Allowable Values: true false
Exceedance Declaration	HasOngoingProgram	Description	For atmospheric: The worker is subject to an ongoing health monitoring program [WHS(M)R rr. 368 and 675F] For noise: The worker has had a baseline audiometric (hearing) test (within 3 months of

Type	Field	Description/Detail	
			commencing) and is subject to an ongoing (every 2 years) hearing testing program [WHS(M)R r. 58(2)]
		Mandatory	Not required for biological samples or if there is no exceedance of the exposure standard
		Type	Boolean
		Validation	Allowable Values: true false
Exceedance Declaration	HasPlanSubmitted	Description	For atmospheric: A Health Management Plan inclusive of airborne contaminants and controls, has been prepared and implemented [WHS(M)R r. 675EA] For noise: A Health Management Plan that includes noise hazards and controls has been prepared and implemented [WHS(M)R r. 675EA] and a report has been prepared by the appointed Noise Officer detailing the plans to reduce the exposure to noise [WHS(M)R schedule 26(2)(2)]
		Mandatory	Not required for biological samples or if there is no exceedance of the exposure standard
		Type	Boolean
		Validation	Allowable Values: true false

2.2 Obsolete

The following fields were previously mandatory but were made obsolete as of 20th April 2018. Any values provided in these fields will be ignored when the file is processed in SRS.

Type	Field	Description/Detail	
Company	ABN / ACN / ARBN	Description	ABN - Australian Business Number ACN - Australian Company Number (only applicable if ACN has an associated ABN) ARBN - Australian Registered Body Numbers
		Mandatory	No. This field is now obsolete
		Type	String

Type	Field	Description/Detail	
Operation	Phone	Format	If ABN – Max length 11 If ACN – Max length 9 If ARBN – Max length 9
		Validation	
		Description	Phone number that can be used to contact company / site regarding the sample record.
		Mandatory	Yes
		Type	String
Sample Collection	Purpose	Format	Max length 12
		Validation	
		Description	Sample collection purpose
		Mandatory	No. This field is now obsolete
		Type	String
Sample Collection	Type	Format	Length 1
		Validation	Allowable values: Q - Quota R – Requested by Inspector O – Other
		Description	Exposure type
		Mandatory	No. This field is now obsolete
		Type	String
Sample Collection	StartTime	Format	Max Length 4
		Validation	This field was only applicable for atmospheric samples.
		Description	Time sampling commenced
		Mandatory	No. This field is now obsolete
		Type	Time
Sample Collection	FinishTime	Format	xs:time
		Validation	
		Description	Time sampling finished
		Mandatory	No. This field is now obsolete
		Type	Time
Sample Collection	FlowRates	Format	xs:time
		Validation	
		Description	Average flow rate used to calculate the total volume of air sampled. For valid sampling the start and end flow rates must not deviate more than 5% (or 10% for asbestos fibre and inhalable dust sampling)
		Mandatory	
		Type	

Type	Field	Description/Detail	
		Mandatory	No. This field is now obsolete
		Type	Decimal
		Format	(9,4)
		Validation	
Sample Collection	ConfinedWorkspace	Description	Indicates whether the person sampled was performing confined space work
		Mandatory	No. This field is now obsolete
		Type	Boolean
		Format	
		Validation	
Sample Collection	RespiratorWorn	Description	Indicates whether the person sampled was wearing a respirator for the majority of the sample duration
		Mandatory	No. This field is now obsolete
		Type	Boolean
		Format	
		Validation	
Sample Collection	ExposureNormal	Description	Indicates whether the exposure conditions were normal
		Mandatory	No. This field is now obsolete
		Type	Boolean
		Format	
		Validation	
Employee	HSN	Description	Health Surveillance Number of the person sampled (MINEHEALTH number)
		Mandatory	No. This field is now obsolete
		Type	Int
		Format	
		Validation	
Shift	Hours	Description	Shift length of the person sampled – hours component
		Mandatory	No. This field is now obsolete
		Type	Int
		Format	
		Validation	
Shift	Minutes	Description	Shift length of the person sampled – minutes component
		Mandatory	No. This field is now obsolete

Type	Field	Description/Detail	
		Type	Int
		Format	
		Validation	Must be either 0, 15, 30 or 45
Company	Contractor	Description	Indicates if person sampled is a contractor
		Mandatory	No. This field is now obsolete
		Type	Boolean
		Format	
		Validation	
Company	ABN / ACN / ARBN	Description	Contractor company code of the person sampled ABN – Australian Business Number ACN - Australian Company Number (only applicable if ACN has an associated ABN) ARBN – Australian Registered Body Numbers Company Code - Unique string allocated by DMP to identify the company operating the site or, for an exploratory drilling project, the exploration company responsible.
		Mandatory	No. This field is now obsolete
		Type	String
		Format	If ABN –Max length11 If ACN – Max length 9 If ARBN – Max length 9 If Company Code - O\{5}
		Validation	*Please note: The format for the Company Code may lengthen in future.
Company	Name	Description	Contracting Company Name of the person sampled
		Mandatory	No. This field is now obsolete
		Type	String
		Format	Max length 60
		Validation	
Sample Result	RosterTimingCode	Description	Timing of the sampled person's roster when the sample was taken eg Start of Shift
		Mandatory	No. This field is now obsolete
		Type	
		Format	
		Validation	
Sample Result	ExceedanceJustification	Description	Reason for Exceedance and Action plan
		Mandatory	No. This field is now obsolete
		Type	String

Type	Field	Description/Detail	
Sample Record	Comments	Format	
		Validation	
		Description	Details of any factors that may have affected the results reported such as unusual events, conditions or work practises during sampling.
		Mandatory	No. This field is now obsolete
		Type	String
Drilling	TenementId	Format	Max length 120
		Validation	
		Description	Tenement identification allocated by the department
		Mandatory	No. This field is now obsolete
		Type	String
Drilling	Location	Format	Max length 20
		Validation	
		Description	Geographical location of the drilling. If exploration is not associated with a mine site, record the latitude and longitude.
		Mandatory	No. This field is now obsolete
		Type	String
Drilling	MethodCode	Format	Max length 60
		Validation	
		Description	Drilling method
		Mandatory	No. This field is now obsolete
		Type	String
Company	CODE	Format	Max length 6
		Validation	Allowable Values: See Appendix G for Drilling Method Codes
		Description	Drilling company code Company Code - Unique string allocated by the department to identify the company operating the site or, for an exploratory drilling project, the exploration company responsible.
		Mandatory	No. This field is now obsolete
		Type	String
Company		Format	If Company Code - O\d{5}
		Validation	*Please note: The format for the Company Code may lengthen in future.
		Description	Drilling company name.

Type	Field	Description/Detail	
	Name	Mandatory	No. This field is now obsolete
		Type	String
		Format	Max length 60
		Validation	

3 Atmospheric XML Schema Definition (XSD)

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified"
  targetNamespace="https://www.worksafe.wa.gov.au/"
  xmlns="https://www.worksafe.wa.gov.au/"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">

  <xs:element name="SampleDocument">
    <xs:complexType>
      <xs:all>
        <xs:element name="SampleRecords">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="SampleRecord" type="SampleRecord" maxOccurs="unbounded" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:all>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="SampleRecord">
    <xs:all>
      <xs:element name="Operation" type="Operation" />
      <xs:element name="RegisteredSampler" type="RegisteredSampler" />
      <xs:element name="SampleCollection" type="SampleCollection" />
      <xs:element name="SampleResults">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="SampleResult" type="SampleResult" maxOccurs="unbounded" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="ExceedanceDeclaration" type="ExceedanceDeclaration" nillable="true"
minOccurs="0" />
    </xs:all>
    <xs:attribute name="Id" type="xs:string" use="required" />
  </xs:complexType>

  <xs:complexType name="Operation" abstract="true">
    <xs:sequence>
      <xs:element name="Company" type="Company" />
      <xs:element name="Site" type="Site" nillable="true" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>

  <xs:complexType name="MiningOperation">
    <xs:complexContent>
      <xs:extension base="Operation" />
    </xs:complexContent>
  </xs:complexType>

  <xs:complexType name="ExplorationOperation">
    <xs:complexContent>
      <xs:extension base="Operation" />
    </xs:complexContent>
  </xs:complexType>

  <xs:complexType name="RegisteredSampler">
    <xs:all>
      <xs:element name="Registration">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Surname">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:all>
  </xs:complexType>
</xs:schema>
```

```

        </xs:simpleType>
    </xs:element>
    <xs:element name="GivenName">
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:maxLength value="30" />
            </xs:restriction>
        </xs:simpleType>
    </xs:element>
</xs:all>
</xs:complexType>

<xs:complexType name="SampleCollection">
    <xs:all>
        <xs:element name="Date" type="xs:date" />
        <xs:element name="CurrentHHMP" type="xs:string" nillable="true" minOccurs="0" />
        <xs:element name="SEGID" type="xs:string" nillable="true" minOccurs="0" />
        <xs:element name="InvestigativeCapacity" type="xs:boolean" nillable="true" minOccurs="0" />
        <xs:element name="EquipmentCode">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="4" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="LocationCode" type="xs:int" />
        <xs:element name="Employee" type="Employee" />
    </xs:all>
</xs:complexType>

<xs:complexType name="Employee">
    <xs:all>
        <xs:element name="Surname">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="30" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="GivenName">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="30" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="DateOfBirth" type="xs:date" />
        <xs:element name="Gender" type="Gender" />
        <xs:element name="OccupationCode" type="xs:int" />
        <xs:element name="Shift" type="Shift" />
    </xs:all>
</xs:complexType>

<xs:complexType name="SampleResult">
    <xs:all>
        <xs:element name="ExposureType">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:enumeration value="TWA" />
                    <xs:enumeration value="PEAK" />
                    <xs:enumeration value="STEL" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="ContaminantCode">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="20" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="Concentration" nillable="true" minOccurs="0">
            <xs:simpleType>
                <xs:restriction base="xs:decimal">

```

```

        <xs:totalDigits value="9" />
        <xs:fractionDigits value="4" />
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="UnitOfMeasure">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:maxLength value="50" />
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="BelowDetectionLimit" type="xs:boolean" nillable="true" minOccurs="0" />
</xs:all>
</xs:complexType>

<xs:complexType name="Company">
  <xs:all>
    <xs:element name="Code">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:pattern value="0\d{5}|\^$" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="Name">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="60" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:all>
</xs:complexType>

<xs:complexType name="Site">
  <xs:all>
    <xs:element name="Code">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:pattern value="SG\d{7}|\^$" />
          <xs:maxLength value="10" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="Name">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="60" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:all>
</xs:complexType>

<xs:complexType name="Shift">
  <xs:all>
    <xs:element name="Length">
      <xs:simpleType>
        <xs:restriction base="xs:decimal">
          <xs:totalDigits value="4" />
          <xs:fractionDigits value="2" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="DaysOn" type="xs:int" />
    <xs:element name="DaysOff" type="xs:int" />
  </xs:all>
</xs:complexType>

<xs:complexType name="ExceedanceDeclaration">
  <xs:all>
    <xs:element name="WasRiskInfoProvided" type="xs:boolean" />
    <xs:element name="WasPPESupplied" type="xs:boolean" />
  </xs:all>
</xs:complexType>

```

```
<xs:element name="WasFitTested" type="xs:boolean" />
<xs:element name="HasOngoingProgram" type="xs:boolean" />
<xs:element name="HasPlanSubmitted" type="xs:boolean" />
</xs:all>
</xs:complexType>

<xs:simpleType name="Gender">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Female" />
    <xs:enumeration value="Male" />
  </xs:restriction>
</xs:simpleType>
</xs:schema>
```

4 Atmospheric Sample Record File Example (XML)

```
<?xml version="1.0" encoding="UTF-8" ?>
<SampleDocument xmlns="https://www.worksafe.wa.gov.au/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <SampleRecords>
    <SampleRecord Id="A0000001">
      <Operation xsi:type="MiningOperation">
        <Company>
          <Code>000001</Code>
          <Name>Test Company</Name>
        </Company>
        <Site>
          <Code>SG0000001</Code>
          <Name>Test Site</Name>
        </Site>
      </Operation>
      <RegisteredSampler>
        <Registration>123123</Registration>
        <Surname>Bana</Surname>
        <GivenName>Eric</GivenName>
      </RegisteredSampler>
      <SampleCollection>
        <Date>2018-09-17</Date>
        <CurrentHHMP>HHMP-000007</CurrentHHMP>
        <SEGID>SEG007</SEGID>
        <InvestigativeCapacity>false</InvestigativeCapacity>
        <EquipmentCode>PPI</EquipmentCode>
        <LocationCode>121</LocationCode>
        <Employee>
          <Surname>Parker</Surname>
          <GivenName>Peter</GivenName>
          <DateOfBirth>1968-01-01</DateOfBirth>
          <Gender>Male</Gender>
          <OccupationCode>110000</OccupationCode>
          <Shift>
            <Length>12</Length>
            <DaysOn>14</DaysOn>
            <DaysOff>6</DaysOff>
          </Shift>
        </Employee>
      </SampleCollection>
      <SampleResults>
        <SampleResult>
          <ExposureType>TWA</ExposureType>
          <ContaminantCode>RES</ContaminantCode>
          <Concentration>3.1012</Concentration>
          <UnitOfMeasure>mg/m3</UnitOfMeasure>
          <BelowDetectionLimit>false</BelowDetectionLimit>
        </SampleResult>
        <SampleResult>
          <ExposureType>TWA</ExposureType>
          <ContaminantCode>SIL</ContaminantCode>
          <Concentration>0.0540</Concentration>
          <UnitOfMeasure>mg/m3</UnitOfMeasure>
          <BelowDetectionLimit>false</BelowDetectionLimit>
        </SampleResult>
      </SampleResults>
      <ExceedanceDeclaration>
        <WasRiskInfoProvided>true</WasRiskInfoProvided>
        <WasPPESupplied>true</WasPPESupplied>
        <WasFitTested>true</WasFitTested>
        <HasOngoingProgram>true</HasOngoingProgram>
        <HasPlanSubmitted>true</HasPlanSubmitted>
      </ExceedanceDeclaration>
    </SampleRecord>
  </SampleRecords>
</SampleDocument>
```

```

<SampleRecord Id="A0000002">
  <Operation xsi:type="MiningOperation">
    <Company>
      <Code>000001</Code>
      <Name>Test Company</Name>
    </Company>
    <Site>
      <Code>SG0000001</Code>
      <Name>Test Site</Name>
    </Site>
  </Operation>

  <RegisteredSampler>
    <Registration>7853</Registration>
    <Surname>Stark</Surname>
    <GivenName>Tony</GivenName>
  </RegisteredSampler>

  <SampleCollection>
    <Date>2018-03-27</Date>
    <Date>2018-09-17</Date>
    <CurrentHHMP>HHMP-000007</CurrentHHMP>
    <SEGID></SEGID>
    <InvestigativeCapacity>true</InvestigativeCapacity>
    <EquipmentCode>ST</EquipmentCode>
    <LocationCode>162</LocationCode>

    <Employee>
      <Surname>Prince</Surname>
      <GivenName>Diana</GivenName>
      <DateOfBirth>1988-04-01</DateOfBirth>
      <Gender>Female</Gender>
      <OccupationCode>123000</OccupationCode>
      <Shift>
        <Length>13.25</Length>
        <DaysOn>21</DaysOn>
        <DaysOff>7</DaysOff>
      </Shift>
    </Employee>
  </SampleCollection>

  <SampleResults>
    <SampleResult>
      <ExposureType>STEL</ExposureType>
      <ContaminantCode>S02</ContaminantCode>
      <Concentration>1.812</Concentration>
      <UnitOfMeasure>ppm</UnitOfMeasure>
      <BelowDetectionLimit>false</BelowDetectionLimit>
    </SampleResult>
    <SampleResult>
      <ExposureType>STEL</ExposureType>
      <ContaminantCode>N02</ContaminantCode>
      <Concentration>2.040</Concentration>
      <UnitOfMeasure>ppm</UnitOfMeasure>
      <BelowDetectionLimit>false</BelowDetectionLimit>
    </SampleResult>
    <SampleResult>
      <ExposureType>TWA</ExposureType>
      <ContaminantCode>HNO</ContaminantCode>
      <Concentration>0.006</Concentration>
      <UnitOfMeasure>ppm</UnitOfMeasure>
      <BelowDetectionLimit>true</BelowDetectionLimit>
    </SampleResult>
  </SampleResults>
</SampleRecord>
</SampleRecords>

</SampleDocument>

```

5 Biological XML Schema Definition (XSD)

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified"
  targetNamespace="https://www.worksafe.wa.gov.au/"
  xmlns="https://www.worksafe.wa.gov.au/"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">

  <xs:element name="SampleDocument">
    <xs:complexType>
      <xs:all>
        <xs:element name="SampleRecords">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="SampleRecord" type="SampleRecord" maxOccurs="unbounded" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:all>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="SampleRecord">
    <xs:all>
      <xs:element name="Operation" type="Operation" />
      <xs:element name="SampleCollection" type="SampleCollection" />
      <xs:element name="SampleResults">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="SampleResult" type="SampleResult" maxOccurs="unbounded" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:all>
    <xs:attribute name="Id" type="xs:string" use="required" />
  </xs:complexType>

  <xs:complexType name="Operation" abstract="true">
    <xs:sequence>
      <xs:element name="Company" type="Company" />
      <xs:element name="Site" type="Site" nillable="true" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>

  <xs:complexType name="MiningOperation">
    <xs:complexContent>
      <xs:extension base="Operation" />
    </xs:complexContent>
  </xs:complexType>

  <xs:complexType name="ExplorationOperation">
    <xs:complexContent>
      <xs:extension base="Operation" />
    </xs:complexContent>
  </xs:complexType>

  <xs:complexType name="SampleCollection">
    <xs:all>
      <xs:element name="Date" type="xs:date" />
      <xs:element name="CurrentHHMP" type="xs:string" nillable="true" minOccurs="0" />
      <xs:element name="SEGID" type="xs:string" nillable="true" minOccurs="0" />
      <xs:element name="InvestigativeCapacity" type="xs:boolean" nillable="true" minOccurs="0" />
      <xs:element name="LocationCode" type="xs:int" />
      <xs:element name="Employee" type="Employee" />
    </xs:all>
  </xs:complexType>

  <xs:complexType name="Employee">
    <xs:all>
      <xs:element name="Surname">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:all>
  </xs:complexType>


```

```

        </xs:simpleType>
      </xs:element>
      <xs:element name="GivenName">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="DateOfBirth" type="xs:date" />
      <xs:element name="Gender" type="Gender" />
      <xs:element name="OccupationCode" type="xs:int" />
      <xs:element name="Shift" type="Shift" />
    </xs:all>
  </xs:complexType>

  <xs:complexType name="SampleResult">
    <xs:all>
      <xs:element name="ContaminantCode">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="20" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Concentration" nillable="true" minOccurs="0">
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="9" />
            <xs:fractionDigits value="4" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="UnitOfMeasure">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="50" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="BelowDetectionLimit" type="xs:boolean" nillable="true" minOccurs="0" />
    </xs:all>
  </xs:complexType>

  <xs:complexType name="Company">
    <xs:all>
      <xs:element name="Code">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:pattern value="0\d{5}|\^$" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Name">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="60" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:all>
  </xs:complexType>

  <xs:complexType name="Site">
    <xs:all>
      <xs:element name="Code">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:pattern value="SG\d{7}|\^$" />
            <xs:maxLength value="10" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Name">

```

```

        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="60" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:all>
  </xs:complexType>

  <xs:complexType name="Shift">
    <xs:all>
      <xs:element name="SampleTiming">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:enumeration value="EndOfShift" />
            <xs:enumeration value="EndOfWorkRoster" />
            <xs:enumeration value="SpotSample" />
            <xs:enumeration value="StartOfShift" />
            <xs:enumeration value="StartOfWorkRoster" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:all>
  </xs:complexType>

  <xs:simpleType name="Gender">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Female" />
      <xs:enumeration value="Male" />
    </xs:restriction>
  </xs:simpleType>
</xs:schema>

```

6 Biological Sample Record File Example (XML)

```
<?xml version="1.0" encoding="UTF-8" ?>
<SampleDocument xmlns="https://www.worksafe.wa.gov.au/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

  <SampleRecords>

    <SampleRecord Id="B0000001">

      <Operation xsi:type="MiningOperation">
        <Company>
          <Code>000001</Code>
          <Name>Test Company</Name>
        </Company>
        <Site>
          <Code>SG0000001</Code>
          <Name>Test Site</Name>
        </Site>
      </Operation>

      <SampleCollection>
        <Date>2018-09-18</Date>
        <CurrentHHMP>HHMP-000007</CurrentHHMP>
        <SEGID>SEG007</SEGID>
        <InvestigativeCapacity>false</InvestigativeCapacity>

        <LocationCode>121</LocationCode>

        <Employee>
          <Surname>Parker</Surname>
          <GivenName>Peter</GivenName>
          <DateOfBirth>1968-01-01</DateOfBirth>
          <Gender>Male</Gender>
          <OccupationCode>110000</OccupationCode>

          <Shift>
            <SampleTiming>StartOfShift</SampleTiming>
          </Shift>
        </Employee>
      </SampleCollection>

      <SampleResults>
        <SampleResult>
          <ContaminantCode>As_bio (Urine)</ContaminantCode>
          <Concentration>19.1200</Concentration>
          <UnitOfMeasure>µg As/L</UnitOfMeasure>
          <BelowDetectionLimit>false</BelowDetectionLimit>
        </SampleResult>
        <SampleResult>
          <ContaminantCode>Pb_bio (Blood)</ContaminantCode>
          <Concentration>15.3400</Concentration>
          <UnitOfMeasure>µg/dL</UnitOfMeasure>
          <BelowDetectionLimit>false</BelowDetectionLimit>
        </SampleResult>
      </SampleResults>
    </SampleRecord>

    <SampleRecord Id="B0000002">

      <Operation xsi:type="MiningOperation">
        <Company>
          <Code>000001</Code>
          <Name>Test Company</Name>
        </Company>
        <Site>
          <Code>SG0000001</Code>
          <Name>Test Site</Name>
        </Site>
      </Operation>

      <SampleCollection>
        <Date>2018-09-18</Date>
```

```

<CurrentHHMP>HHMP-000007</CurrentHHMP>
<SEGID>SEG023</SEGID>
<InvestigativeCapacity>false</InvestigativeCapacity>
<LocationCode>162</LocationCode>

<Employee>
  <Surname>Prince</Surname>
  <GivenName>Diana</GivenName>
  <DateOfBirth>1988-04-01</DateOfBirth>
  <Gender>Female</Gender>
  <OccupationCode>123000</OccupationCode>
  <Shift>
    <SampleTiming>SpotSample</SampleTiming>
  </Shift>
</Employee>
</SampleCollection>

<SampleResults>

  <SampleResult>
    <ContaminantCode>As_bio (Urine)</ContaminantCode>
    <Concentration>14.1500</Concentration>
    <UnitOfMeasure>µg As/L</UnitOfMeasure>
    <BelowDetectionLimit>false</BelowDetectionLimit>
  </SampleResult>

  <SampleResult>
    <ContaminantCode>Pb_bio (Blood)</ContaminantCode>
    <Concentration>1.9340</Concentration>
    <UnitOfMeasure>µg/dL</UnitOfMeasure>
    <BelowDetectionLimit>false</BelowDetectionLimit>
  </SampleResult>
</SampleResults>
</SampleRecord>
</SampleRecords>

</SampleDocument>

```

7 Noise XML Schema Definition (XSD)

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified"
  targetNamespace="https://www.worksafe.wa.gov.au/"
  xmlns="https://www.worksafe.wa.gov.au/"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">

  <xs:element name="SampleDocument">
    <xs:complexType>
      <xs:all>
        <xs:element name="SampleRecords">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="SampleRecord" type="SampleRecord" maxOccurs="unbounded" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:all>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="SampleRecord">
    <xs:all>
      <xs:element name="Operation" type="Operation" />
      <xs:element name="RegisteredSampler" type="RegisteredSampler" />
      <xs:element name="SampleCollection" type="SampleCollection" />
      <xs:element name="SampleResults">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="SampleResult" type="SampleResult" maxOccurs="unbounded" />
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="ExceedanceDeclaration" type="ExceedanceDeclaration" nillable="true"
minOccurs="0" />
    </xs:all>
    <xs:attribute name="Id" type="xs:string" use="required" />
  </xs:complexType>

  <xs:complexType name="Operation" abstract="true">
    <xs:sequence>
      <xs:element name="Company" type="Company" />
      <xs:element name="Site" type="Site" nillable="true" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>

  <xs:complexType name="MiningOperation">
    <xs:complexContent>
      <xs:extension base="Operation" />
    </xs:complexContent>
  </xs:complexType>

  <xs:complexType name="ExplorationOperation">
    <xs:complexContent>
      <xs:extension base="Operation" />
    </xs:complexContent>
  </xs:complexType>

  <xs:complexType name="RegisteredSampler">
    <xs:all>
      <xs:element name="Registration">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Surname">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:all>
  </xs:complexType>
</xs:schema>
```

```

</xs:element>
<xs:element name="GivenName">
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:maxLength value="30" />
    </xs:restriction>
  </xs:simpleType>
</xs:element>
</xs:all>
</xs:complexType>

<xs:complexType name="SampleCollection">
  <xs:all>
    <xs:element name="Date" type="xs:date" />
    <xs:element name="CurrentHHMP" type="xs:string" nillable="true" minOccurs="0" />
    <xs:element name="SEGID" type="xs:string" nillable="true" minOccurs="0" />
    <xs:element name="InvestigativeCapacity" type="xs:boolean" nillable="true" minOccurs="0" />
    <xs:element name="LocationCode" type="xs:int" />
    <xs:element name="Employee" type="Employee" />
    <xs:element name="PPEType" nillable="true" minOccurs="0">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="EM" />
          <xs:enumeration value="em" />
          <xs:enumeration value="EP" />
          <xs:enumeration value="ep" />
          <xs:enumeration value="CPM" />
          <xs:enumeration value="cpm" />
          <xs:enumeration value="None" />
          <xs:enumeration value="NONE" />
          <xs:enumeration value="Other" />
          <xs:enumeration value="OTHER" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="PPETypeOther" nillable="true" minOccurs="0">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="50" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="PPEClass" nillable="true" minOccurs="0">
      <xs:simpleType>
        <xs:restriction base="xs:int">
          <xs:enumeration value="1" />
          <xs:enumeration value="2" />
          <xs:enumeration value="3" />
          <xs:enumeration value="4" />
          <xs:enumeration value="5" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:all>
</xs:complexType>

<xs:complexType name="Employee">
  <xs:all>
    <xs:element name="Surname">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="30" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="GivenName">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="30" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="DateOfBirth" type="xs:date" />
    <xs:element name="Gender" type="Gender" />
  </xs:all>
</xs:complexType>

```

```

        <xs:element name="OccupationCode" type="xs:int" />
        <xs:element name="Shift" type="Shift" />
    </xs:all>
</xs:complexType>

<xs:complexType name="SampleResult">
    <xs:all>
        <xs:element name="ContaminantCode">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="20" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="Concentration" nillable="true" minOccurs="0">
            <xs:simpleType>
                <xs:restriction base="xs:decimal">
                    <xs:totalDigits value="9" />
                    <xs:fractionDigits value="4" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="UnitOfMeasure">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="50" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="AttenuationExpected">
            <xs:simpleType>
                <xs:restriction base="xs:decimal">
                    <xs:totalDigits value="9" />
                    <xs:fractionDigits value="2" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
    </xs:all>
</xs:complexType>

<xs:complexType name="Company">
    <xs:all>
        <xs:element name="Code">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:pattern value="0\d{5}|\^$" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="Name">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="60" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
    </xs:all>
</xs:complexType>

<xs:complexType name="Site">
    <xs:all>
        <xs:element name="Code">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:pattern value="SG\d{7}|\^$" />
                    <xs:maxLength value="10" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="Name">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="60" />
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
    </xs:all>
</xs:complexType>

```

```

        </xs:simpleType>
      </xs:element>
    </xs:all>
  </xs:complexType>

  <xs:complexType name="Shift">
    <xs:all>
      <xs:element name="Length">
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="4" />
            <xs:fractionDigits value="2" />
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="DaysOn" type="xs:int" />
      <xs:element name="DaysOff" type="xs:int" />
    </xs:all>
  </xs:complexType>

  <xs:complexType name="ExceedanceDeclaration">
    <xs:all>
      <xs:element name="WasRiskInfoProvided" type="xs:boolean" />
      <xs:element name="WasPPESupplied" type="xs:boolean" />
      <xs:element name="WasFitTested" type="xs:boolean" />
      <xs:element name="HasOngoingProgram" type="xs:boolean" />
      <xs:element name="HasPlanSubmitted" type="xs:boolean" />
    </xs:all>
  </xs:complexType>

  <xs:simpleType name="Gender">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Female" />
      <xs:enumeration value="Male" />
    </xs:restriction>
  </xs:simpleType>
</xs:schema>

```

8 Noise Dosimetry Record File Example (XML)

```
<?xml version="1.0" encoding="UTF-8" ?>
<SampleDocument xmlns="https://www.worksafe.wa.gov.au/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

  <SampleRecords>

    <SampleRecord Id="N0000001">

      <Operation xsi:type="MiningOperation">
        <Company>
          <Code>000001</Code>
          <Name>Test Company</Name>
        </Company>
        <Site>
          <Code>SG0000001</Code>
          <Name>Test Site</Name>
        </Site>
      </Operation>

      <RegisteredSampler>
        <Registration>534576</Registration>
        <Surname>Oscorp</Surname>
        <GivenName>Oswald</GivenName>
      </RegisteredSampler>

      <SampleCollection>
        <Date>2018-09-18</Date>
        <CurrentHHMP>HHMP-000007</CurrentHHMP>
        <SEGID>SEG007</SEGID>
        <InvestigativeCapacity>false</InvestigativeCapacity>
        <LocationCode>121</LocationCode>

        <Employee>
          <Surname>Parker</Surname>
          <GivenName>Peter</GivenName>
          <DateOfBirth>1968-01-01</DateOfBirth>
          <Gender>Male</Gender>
          <OccupationCode>110000</OccupationCode>
          <Shift>
            <Length>12</Length>
            <DaysOn>14</DaysOn>
            <DaysOff>6</DaysOff>
          </Shift>
        </Employee>

        <PPEType>OTHER</PPEType>
        <PPETypeOther>Beats by Dr Dre</PPETypeOther>
        <PPEClass>1</PPEClass>
      </SampleCollection>

      <SampleResults>
        <SampleResult>
          <ContaminantCode>Noise_LAeq8h</ContaminantCode>
          <Concentration>87</Concentration>
          <UnitOfMeasure>dB(A)</UnitOfMeasure>
          <AttenuationExpected>0</AttenuationExpected>
        </SampleResult>
        <SampleResult>
          <ContaminantCode>Noise_Lpeak</ContaminantCode>
          <Concentration>140</Concentration>
          <UnitOfMeasure>dB(C)</UnitOfMeasure>
          <AttenuationExpected>0</AttenuationExpected>
        </SampleResult>
      </SampleResults>

      <ExceedanceDeclaration>
        <WasRiskInfoProvided>true</WasRiskInfoProvided>
        <WasPPESupplied>true</WasPPESupplied>
        <WasFitTested>false</WasFitTested>
        <HasOngoingProgram>true</HasOngoingProgram>
        <HasPlanSubmitted>true</HasPlanSubmitted>
      </ExceedanceDeclaration>
    </SampleRecord>
  </SampleRecords>
</SampleDocument>
```

```

</ExceedanceDeclaration>
</SampleRecord>

<SampleRecord Id="N0000002">

  <Operation xsi:type="MiningOperation">
    <Company>
      <Code>000001</Code>
      <Name>Test Company</Name>
    </Company>
    <Site>
      <Code>SG0000001</Code>
      <Name>Test Site</Name>
    </Site>
  </Operation>

  <RegisteredSampler>
    <Registration>17853</Registration>
    <Surname>Wayne</Surname>
    <GivenName>Bruce</GivenName>
  </RegisteredSampler>

  <SampleCollection>
    <Date>2018-09-18</Date>
    <CurrentHHMP>HHMP-000007</CurrentHHMP>
    <SEGID>SEG023</SEGID>
    <InvestigativeCapacity>false</InvestigativeCapacity>
    <LocationCode>162</LocationCode>

    <Employee>
      <Surname>Prince</Surname>
      <GivenName>Diana</GivenName>
      <DateOfBirth>1988-04-01</DateOfBirth>
      <Gender>Female</Gender>
      <OccupationCode>123000</OccupationCode>
      <Shift>
        <Length>13.25</Length>
        <DaysOn>21</DaysOn>
        <DaysOff>7</DaysOff>
      </Shift>
    </Employee>

    <PPEType>CPM</PPEType>
    <PPEClass>4</PPEClass>

  </SampleCollection>

  <SampleResults>
    <SampleResult>
      <ContaminantCode>Noise_LAeq8h</ContaminantCode>
      <Concentration>81</Concentration>
      <UnitOfMeasure>dB(A)</UnitOfMeasure>
      <AttenuationExpected>26</AttenuationExpected>
    </SampleResult>
    <SampleResult>
      <ContaminantCode>Noise_Lpeak</ContaminantCode>
      <Concentration>122</Concentration>
      <UnitOfMeasure>dB(C)</UnitOfMeasure>
      <AttenuationExpected>26</AttenuationExpected>
    </SampleResult>
  </SampleResults>

</SampleRecord>

</SampleRecords>

</SampleDocument>

```

9 Combined Sample Record File Example (XML)

```
<?xml version="1.0" encoding="UTF-8" ?>
<SampleDocument xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="
http://www.w3.org/2001/XMLSchema-instance" xmlns="
https://www.worksafe.wa.gov.au">
  <SampleRecords>
    <SampleRecord Id="N0000001">
      <Operation xsi:type="MiningOperation">
        <Company>
          <Code>000001</Code>
          <Name>Test Company</Name>
        </Company>
        <Site>
          <Code>SG0000001</Code>
          <Name>Test Site</Name>
        </Site>
      </Operation>
      <RegisteredSampler>
        <Registration>534576</Registration>
        <Surname>Oscorp</Surname>
        <GivenName>Oswald</GivenName>
      </RegisteredSampler>
      <SampleCollection>
        <Date>2018-09-18</Date>
        <CurrentHHMP>HHMP-000007</CurrentHHMP>
        <SEGID>SEG007</SEGID>
        <InvestigativeCapacity>false</InvestigativeCapacity>
        <LocationCode>121</LocationCode>
        <Employee>
          <Surname>Parker</Surname>
          <GivenName>Peter</GivenName>
          <DateOfBirth>1968-01-01</DateOfBirth>
          <Gender>Male</Gender>
          <OccupationCode>110000</OccupationCode>
          <Shift>
            <Length>12</Length>
            <DaysOn>14</DaysOn>
            <DaysOff>6</DaysOff>
          </Shift>
        </Employee>
        <PPEType>OTHER</PPEType>
        <PPETypeOther>Beats by Dr Dre</PPETypeOther>
        <PPEClass>1</PPEClass>
      </SampleCollection>
      <SampleResults>
        <SampleResult>
          <ContaminantCode>Noise_LAeq8h</ContaminantCode>
          <Concentration>87</Concentration>
          <UnitOfMeasure>dB(A)</UnitOfMeasure>
          <AttenuationExpected>0</AttenuationExpected>
        </SampleResult>
        <SampleResult>
          <ContaminantCode>Noise_Lpeak</ContaminantCode>
          <Concentration>140</Concentration>
          <UnitOfMeasure>dB(C)</UnitOfMeasure>
          <AttenuationExpected>0</AttenuationExpected>
        </SampleResult>
      </SampleResults>
      <ExceedanceDeclaration>
        <WasRiskInfoProvided>true</WasRiskInfoProvided>
      </ExceedanceDeclaration>
    </SampleRecord>
  </SampleRecords>
</SampleDocument>
```

```

    <WasPPESupplied>true</WasPPESupplied>
    <WasFitTested>false</WasFitTested>
    <HasOngoingProgram>true</HasOngoingProgram>
    <HasPlanSubmitted>true</HasPlanSubmitted>
  </ExceedanceDeclaration>
</SampleRecord>
<SampleRecord Id="A0000001">
  <Operation xsi:type="MiningOperation">
    <Company>
      <Code>000001</Code>
      <Name>Test Company</Name>
    </Company>
    <Site>
      <Code>SG0000001</Code>
      <Name>Test Site</Name>
    </Site>
  </Operation>
  <RegisteredSampler>
    <Registration>123123</Registration>
    <Surname>Bana</Surname>
    <GivenName>Eric</GivenName>
  </RegisteredSampler>
  <SampleCollection>
    <Date>2018-09-18</Date>
    <CurrentHHMP>HHMP-000007</CurrentHHMP>
    <SEGID>SEG007</SEGID>
    <InvestigativeCapacity>false</InvestigativeCapacity>
    <EquipmentCode>CA</EquipmentCode>
    <LocationCode>121</LocationCode>
    <Employee>
      <Surname>Parker</Surname>
      <GivenName>Peter</GivenName>
      <DateOfBirth>1968-01-01</DateOfBirth>
      <Gender>Male</Gender>
      <OccupationCode>110000</OccupationCode>
      <Shift>
        <Length>12</Length>
        <DaysOn>14</DaysOn>
        <DaysOff>6</DaysOff>
      </Shift>
    </Employee>
  </SampleCollection>
  <SampleResults>
    <SampleResult>
      <ExposureType>TWA</ExposureType>
      <ContaminantCode>RES</ContaminantCode>
      <Concentration>3.1012</Concentration>
      <UnitOfMeasure>mg/m3</UnitOfMeasure>
      <BelowDetectionLimit>false</BelowDetectionLimit>
    </SampleResult>
    <SampleResult>
      <ExposureType>TWA</ExposureType>
      <ContaminantCode>SIL</ContaminantCode>
      <Concentration>0.0540</Concentration>
      <UnitOfMeasure>mg/m3</UnitOfMeasure>
      <BelowDetectionLimit>false</BelowDetectionLimit>
    </SampleResult>
  </SampleResults>
  <ExceedanceDeclaration>
    <WasRiskInfoProvided>true</WasRiskInfoProvided>
    <WasPPESupplied>true</WasPPESupplied>
    <WasFitTested>true</WasFitTested>
  </ExceedanceDeclaration>
</SampleRecord>

```

```

        <HasOngoingProgram>true</HasOngoingProgram>
        <HasPlanSubmitted>true</HasPlanSubmitted>
    </ExceedanceDeclaration>
</SampleRecord>
<SampleRecord Id="B0000001">
    <Operation xsi:type="MiningOperation">
        <Company>
            <Code>000001</Code>
            <Name>Test Company</Name>
        </Company>
        <Site>
            <Code>SG0000001</Code>
            <Name>Test Site</Name>
        </Site>
    </Operation>
    <SampleCollection>
        <Date>2018-09-18</Date>
        <CurrentHHMP>HHMP-000007</CurrentHHMP>
        <SEGID>SEG007</SEGID>
        <InvestigativeCapacity>false</InvestigativeCapacity>
        <LocationCode>121</LocationCode>
        <Employee>
            <Surname>Parker</Surname>
            <GivenName>Peter</GivenName>
            <DateOfBirth>1968-01-01</DateOfBirth>
            <Gender>Male</Gender>
            <OccupationCode>110000</OccupationCode>
            <Shift>
                <SampleTiming>StartOfShift</SampleTiming>
            </Shift>
        </Employee>
    </SampleCollection>
    <SampleResults>
        <SampleResult>
            <ContaminantCode>As_bio (Urine)</ContaminantCode>
            <Concentration>19.1200</Concentration>
            <UnitOfMeasure>µg As/L</UnitOfMeasure>
            <BelowDetectionLimit>false</BelowDetectionLimit>
        </SampleResult>
        <SampleResult>
            <ContaminantCode>Pb_bio (Blood)</ContaminantCode>
            <Concentration>15.3400</Concentration>
            <UnitOfMeasure>µg/dL</UnitOfMeasure>
            <BelowDetectionLimit>false</BelowDetectionLimit>
        </SampleResult>
    </SampleResults>
</SampleRecord>
<SampleRecord Id="A0000002">
    <Operation xsi:type="MiningOperation">
        <Company>
            <Code>000001</Code>
            <Name>Test Company</Name>
        </Company>
        <Site>
            <Code>SG0000001</Code>
            <Name>Test Site</Name>
        </Site>
    </Operation>
    <RegisteredSampler>
        <Registration>7853</Registration>
    </RegisteredSampler>

```

```

    <Surname>Stark</Surname>
    <GivenName>Tony</GivenName>
</RegisteredSampler>

<SampleCollection>
  <Date>2018-09-18</Date>
  <CurrentHHMP>HHMP-000007</CurrentHHMP>
  <SEGID></SEGID>
  <InvestigativeCapacity>true</InvestigativeCapacity>
  <EquipmentCode>ST</EquipmentCode>
  <LocationCode>162</LocationCode>

  <Employee>
    <Surname>Prince</Surname>
    <GivenName>Diana</GivenName>
    <DateOfBirth>1988-04-01</DateOfBirth>
    <Gender>Female</Gender>
    <OccupationCode>123000</OccupationCode>

    <Shift>
      <Length>13.25</Length>
      <DaysOn>21</DaysOn>
      <DaysOff>7</DaysOff>
    </Shift>
  </Employee>
</SampleCollection>

<SampleResults>

  <SampleResult>
    <ExposureType>STEL</ExposureType>
    <ContaminantCode>S02</ContaminantCode>
    <Concentration>1.812</Concentration>
    <UnitOfMeasure>ppm </UnitOfMeasure>
    <BelowDetectionLimit>false</BelowDetectionLimit>
  </SampleResult>

  <SampleResult>
    <ExposureType>STEL</ExposureType>
    <ContaminantCode>N02</ContaminantCode>
    <Concentration>2.040</Concentration>
    <UnitOfMeasure>ppm </UnitOfMeasure>
    <BelowDetectionLimit>false</BelowDetectionLimit>
  </SampleResult>

  <SampleResult>
    <ExposureType>TWA</ExposureType>
    <ContaminantCode>HNO</ContaminantCode>
    <Concentration>0.006</Concentration>
    <UnitOfMeasure>ppm</UnitOfMeasure>
    <BelowDetectionLimit>true</BelowDetectionLimit>
  </SampleResult>

</SampleResults>

</SampleRecord>

</SampleRecords>

</SampleDocument>

```

ii. Appendix B - Reference codes required for XML and Excel files

All codes can be found in the following document: [Safety Regulation System \(SRS\) health and hygiene code index.](#)

Alternatively, there is an Excel spreadsheet, SRS - Health and Hygiene Codes.xlsx, which is located in the directory **03 - Reference Data**.

iii. Appendix C - Using the Excel template for bulk upload

Refer to the guide: **02 - Using the Excel template for bulk upload.pdf**.

iv. Appendix D - Accessing and uploading data into SRS

Refer to the guide: **01 - Accessing and uploading data into SRS.pdf**.