

ANÁLISIS CUANTITATIVO DE RIESGOS EN EL ÁMBITO DEL *ARE MONTESA* EN ESPLUGUES D ELLOBREGAT (BARCELONA)



Tauw



Análisis Cuantitativo de Riesgos en el ámbito del ARE Montesa en Esplugues de Llobregat (Barcelona)

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1 Introducción

Tauw Iberia S.A.U. ha sido contratada por la Junta de Compensación ARE Montesa con el fin de llevar a cabo un análisis cuantitativo de riesgos para la salud humana (ACR) en el ámbito del ARE Montesa, en el término municipal de Esplugues de Llobregat (Barcelona).

De acuerdo a lo estipulado en el Real Decreto 9/2005 de suelos contaminados, la obtención de resultados analíticos por encima de los criterios de referencia requiere de la realización de un Análisis Cuantitativo de Riesgos (ACR) con el fin de evaluar si existen niveles de riesgo para la salud humana.

El ámbito del ARE Montesa se localiza al sur del término municipal de Esplugues de Llobregat, en el barrio Montesa, frontera con los términos municipales de Cornellá de Llobregat y L'Hospitalet de Llobregat. Comprende suelos en la actualidad industriales (antigua fábrica "Montesa" y parcelas industriales próximas), suelos residenciales (algunas islas de edificaciones unifamiliares adyacentes) y equipamientos (antiguo campo de fútbol del "Rayo Amarillo").

En Diciembre 2017 Tauw Iberia elaboró una Evaluación Ambiental, Fase I del ámbito del ARE Montesa, en la que se identificaron suelos que soportan o han soportado en el pasado actividades potencialmente contaminantes del suelo, así como dos grandes áreas no pavimentadas destinadas a aparcamiento de vehículos.

En Marzo 2018, el ARC emitió un informe técnico que informaba favorablemente la Modificación Puntual del PDU del ARE Montesa, siempre y cuando se tuvieran en cuenta las consideraciones de dicho informe, que en relación a los suelos contaminados contemplaban la ejecución de un estudio de la calidad del suelo.

Entre mayo y octubre de 2018, Tauw Iberia llevó a cabo las Investigaciones Preliminar y complementaria de la calidad del suelo en el ámbito del ARE Montesa como respuesta al requerimiento del ARC, en cuyos resultados se basa el presente Análisis Cuantitativo de Riesgos (ACR).

El Capítulo 1 es una introducción del documento, y también muestra los principales objetivos que se pretenden alcanzar en este análisis. Toda la información disponible utilizada para establecer el modelo conceptual se presenta en el Capítulo 2. El capítulo 3 contiene los resultados de la evaluación de riesgos. En el capítulo 4 se presentan las principales conclusiones de este estudio. Este informe también incluye apéndices en los que se presentan todos los datos de entrada y los resultados de los cálculos pertinentes.

1.1 Objetivos y metodología

Los principales objetivos de la elaboración del ACR son los siguientes:

- Determinar el nivel de riesgo al que pueden verse sometidos los potenciales receptores en el ámbito de las distintas parcelas y su entorno a causa de los contaminantes detectados en suelo en las diferentes caracterizaciones analíticas realizadas.
- Proporcionar un diagnóstico de la calidad del suelo en el emplazamiento en términos de riesgo que permita establecer si se trata de un espacio contaminado o no de acuerdo a la normativa vigente (R.D. 9/2005).
- Identificar aquellos elementos de riesgo críticos y su contribución al nivel de riesgo global, de manera que se facilite el proceso para la toma de decisiones en el proceso de gestión del riesgo en el emplazamiento y, eventualmente, establecer las directrices de actuación de cara a dar solución a la contaminación existente.

La metodología aplicada para realizar el estudio ha seguido directrices contrastadas por diversos organismos públicos nacionales e internacionales, y en particular aquellas establecidas en la "Guía metodológica para el análisis de riesgos para la salud humana y los ecosistemas" del Gobierno Vasco (IHOBE, 1998), las recogidas por la Consejería de Medio Ambiente y Ordenación del Territorio de la Comunidad de Madrid en el documento "Guía de análisis de riesgos para la salud humana y los ecosistemas" (CMOT, 2004), y las publicadas por la Agencia Ambiental de EE.UU., en el documento "Risk assessment guidance for superfund. Vol I, Human health evaluation manual" (USEPA, 1989).

La estructura del análisis de riesgos es la siguiente:

- *Modelo Conceptual del emplazamiento(CSM)*. Se han identificado y descrito los principales aspectos de la situación ambiental en este emplazamiento, proporcionando el punto de partida para el resto del estudio en forma de escenarios de exposición.
- *Análisis Cuantitativo de Riesgos (ACR)*: una vez que se ha perfilado el CSM, se realiza el ACR, siguiendo el correspondiente enfoque por pasos:
 - Evaluación de la toxicidad. Se ha comprobado y actualizado la información fisicoquímica y toxicológica de los contaminantes en cuestión (dosis de referencia, factores de pendiente).
 - Evaluación de la exposición. Las ingestas de exposición para cada contaminante de interés han sido cuantificadas utilizando RBCA 2.6 Tool Kit for Chemical Releases (Servicios de Aguas Subterráneas, 2000), que se basa en el documento guía "Standard Guide for Risk-Based Corrective Action" (ASTM, 2004).
 - La estimación del riesgo y los niveles de riesgo integrados se han obtenido para cada escenario de exposición.

- Evaluación de la incertidumbre. Evaluación de cualquier incertidumbre derivada del análisis de riesgos.

- **Conclusiones y recomendaciones:** Se analizan todos los factores pertinentes que intervienen en situaciones de riesgo inaceptables, si los hubiere, para determinar su contribución al riesgo global, y se han propuesto medidas pertinentes para mitigar esas situaciones, en caso necesario.

Todo el documento ha sido definido bajo un enfoque conservador, de forma que cualquier situación de riesgo se descartaría aplicando los criterios de precaución.

2 Modelo conceptual

El presente análisis de riesgos para la salud humana se ha fundamentado en los resultados de la investigación del suelo que se ha llevado a cabo en el emplazamiento entre mayo y octubre de 2018 así como otra información relevante del emplazamiento recopilada para diseñar dicha investigación.

En la medida que se han necesitado otros datos para completar el modelo conceptual, se ha recurrido a fuentes bibliográficas de reconocido prestigio, los cuales quedan recogidos en los siguientes epígrafes.

2.1 Descripción de la fuente

Tal como se recoge en los Informes de Investigación preliminar y complementaria, el ámbito de estudio se ha dividido en tres sectores:

- **Sector 1:** zona donde desarrolló su actividad la **factoría Montesa**, dedicada a la fabricación de motocicletas. Algunas de las naves, situadas en el extremo Este (pertenecientes a la antigua **Montesita**) son usadas como almacenes de muebles, electrodomésticos y otros enseres de segunda mano. Se identificó en esta área (antigua Montesita) una nave cuyo uso histórico fue de fundición, y contiguo a esta nave, en el patio exterior, se ha localizado el antiguo depósito enterrado de gasoil que abastecía las calderas de la fundición.

Todas las actividades se desarrollan sobre áreas pavimentadas, a excepción de una superficie localizada al Sur, ocupada por el **depósito municipal de coches**, que se halla sobre una zona sin pavimentar.

- **Sector 2:** parcela donde desarrolló su actividad una **antigua actividad textil**, actualmente ocupada por la empresa Copisa, para uso de oficinas y almacén de material de construcción.

Contigua a esta parcela se identifica, un pequeño solar sin pavimentar, cubierto de vegetación, y sin uso actual. El estudio histórico identificó que a partir de la foto histórica de 1974, hasta el año 2008 en el solar había una construcción de uso desconocido.

También comprende un aparcamiento municipal pavimentado.

- **Sector 3:** se trata de 2 solares sin pavimentar, cuyo uso actual es como **aparcamiento público**. El **solar conocido como “El Rayo”** albergaba en el pasado el campo de fútbol de la Unió Esportiva Rayo, de Esplugues. El solar situado en la calle Pompeu Fabra, aparentemente nunca ha tenido uso.

La superficie total del ámbito de la investigación es de unos 75.000 m².



Figura 2.2 Área de estudio (Fuente: Google Earth)

Tras realizar las investigaciones del suelo llevadas a cabo entre mayo y octubre de 2018, sobre las que se sustenta el presente análisis de riesgos, se asume que existen diferentes fuentes de riesgo en el emplazamiento asociadas a las distintas afecciones detectadas en suelo.

Teniendo en cuenta la información obtenida, en todos los sectores estudiados se consideran como fuentes potenciales de riesgo, las siguientes:

- Aire intersticial (al detectarse compuestos volátiles en el suelo)
- Suelo

Al no existir muestras del aire intersticial, se aplicarán modelos de transporte desde el suelo a dicho aire y de allí al aire interior y al aire exterior, por lo que los contaminantes a considerar son los identificados únicamente en el suelo.

Se seleccionan para la valoración de riesgos aquellos contaminantes que durante las etapas anteriores de investigación han cumplido al menos uno de los requisitos siguientes:

1. Se incluirán en el análisis de riesgos los contaminantes cuyas concentraciones detectadas en suelo superen el NGR para uso urbano correspondiente (de acuerdo a la normativa vigente, R.D. 9/2005).
2. Otros contaminantes que hayan sido detectados en suelo pero carezcan de NGR también serán incluidos en el análisis de riesgos siempre que se cuente con parámetros toxicológicos para ellos con el fin de mantener un criterio conservador en la selección de contaminantes.
3. Los Hidrocarburos Totales de Petróleo (TPHs) no están incluidos en ninguna de las tablas de los Anexos V o VI del RD 9/2005. Sin embargo, el apéndice IV establece que debe llevarse a cabo una evaluación del riesgo si la concentración de HTP en el suelo es superior a 50 mg/kg.

Los criterios de selección de contaminantes anteriores se realiza de forma independiente para cada uno de los Sectores definidos con sus correspondientes subsectores. Los sectores y subsectores considerados son los mismos que en la investigación preliminar y se recogen a continuación en la Tabla 2.1.

Tabla 2.1 Sectores y subsectores considerados

SECTOR	SUBSECTOR
1	Montesa
	Montesita
2	Aparcamiento municipal
	COPIA+Solar anexo
3	Aparcamiento Rayo
	Aparcamiento Pompeu Fabra

En base a los criterios anteriores se han identificado los siguientes focos de afección dentro de cada uno de los subsectores anteriores, los cuales se valoran en el presente análisis de riesgos, resumidos en la siguiente tabla.

Tabla 2.2 Focos de afección de suelo y agua subterránea

SECTOR	SUB SECTOR	Foco	Localización	Sondeos	Profundidad	Contaminantes	Concentración Max (mg/kg)	Sondeo de conc.max
1	Montesa	1	Zona Oeste	S-23, S-24, S-14, S-15, S-16, S-17, S-22	desde 0 a 1 m	Plomo	140	S-15
						Benzo (a) pireno	0,28	S-17
						Fenantreno	0,2	S-17
						Benzo (g,h,i) perileno	0,15	S-17
						1,1,1-tricloroetano	0,65	S-16
						Dibromometano	0,025	S-22
	Montesita	2	Zona Central	S-08	desde 0 a 1 m	PCBs	1,7	S-08
						TPHs	300	C-01
							Di-n-butilftalato	0,16
		3	Zona Este	S-03, C-01, C-05	desde 0 a 1 m	TPHs	28000	S-38
						Bis (2-etilhexil)ftalato	5,5	S-38
2	Suelo profundo en la zona del tanque	2	Suelo profundo en la zona del tanque	S-35	desde 1 m a 5 m	Antimonio	31	S-35
						Cobre	2900	S-35
						Plomo	300	S-35
						Molibdeno	14	S-35
						Zinc	4200	S-35
						3	Suelo superficial general	C-10, C-17, C-18, C-08, C-07, C-06
	TPHs	840	C-18					
	Fenantreno	0,22	C-17					

SECTOR	SUB SECTOR	Foco	Localización	Sondeos	Profundidad	Contaminantes	Concentración Max (mg/kg)	Sondeo de conc.max
						Benzo (g,h,i) perileno	0,39	C-17
						Bis (2-etilhexil)ftalato	1	C-08
						Butilbenzilftalato	0,16	C-18
						1,3,5-trimetilbenceno	0,083	C-06
						1,2,4-trimetilbenceno	0,23	C-06
						1,1,1-tricloroetano	0,021	C-07
2	Aparcamiento municipal	1	Suelo superficial general	S-40, S-43, S-44	desde 0 a 1 m	Plomo	83	S-40
						TPHs	250	S-40
						Benzo (a) pireno	0,99	S-43
						Fenantreno	0,46	S-43
						Benzo(ghi)perileno	0,82	S-43
						Bis (2-etilhexil)ftalato	0,1	S-40
						Dibenzo(a,h)antraceno	0,32	S-43
	COPISA	1	Suelo superficial general	C-11, C-13, C-15, S-27	desde 0 a 1 m	Antimonio	7,8	C-11
						Plomo	83	C-13
						Benzo(a)pireno	1,4	C-13
						Fenantreno	2,4	C-13
						Benzo(g,h,i)perileno	0,14	C-13
						Bis (2-etilhexil)ftalato	0,16	C-15
						Carbazol	0,33	C-13
						Dibenzofurano	0,14	C-13

SECTOR	SUB SECTOR	Foco	Localización	Sondeos	Profundidad	Contaminantes	Concentración Max (mg/kg)	Sondeo de conc.max
3	Aparcamiento Rayo	1	Suelo superficial general	C-31, C-33, C-34, C-35, C-39 C-42, C-43	desde 0 a 1 m	TPHs	55	C-39
						Cobre	590	C-35
						Plomo	63	C-42
						Bis (2-etilhexil)ftalato	0,41	C-43
						Fenantreno	0,2	C-38
	Aparcamiento Pompeu Fabra	1	Suelo superficial general	C-19, C-21	desde 0 a 1 m	Plomo	170	C-21
						TPHs	150	C-21
						Benzo (g,h,i) perileno	0,22	C-21
						Cis(1) pemetrina	0,22	C-19
						Trans(2) pemetrina	0,31	C-19

Para poder evaluar los efectos de los TPHs sobre la salud humana es preciso contar con una analítica específica (fraccionamiento en alifáticos y aromáticos y determinación posterior de subgrupos determinados según su número de átomos de carbono). Los resultados de dichas analíticas se han ajustado a la concentración obtenida en el caso de TPHs totales C5-C40 sin separación en alifáticos y aromáticos.

En este caso, los valores de TPHs obtenidos en la analítica fraccionada no son iguales a los de la analítica de TPHs totales (la suma de fracciones de TPHs analizados son inferiores al valor de TPHs totales) ni tampoco se dispone de esta analítica en todos los subsectores donde se detectan TPHs. Por ello, siguiendo un enfoque conservador, la concentración más alta detectada de TPHs totales ha sido dividida en fracciones alifáticas y aromáticas de acuerdo con el porcentaje de distribución obtenido en la analítica fraccionada.

Adicionalmente, se ha asimilado la distribución de fraccionamiento de los TPHs de cada sector a la muestra cuya distribución de fracciones pesadas y ligeras más se asemejase a los fraccionamientos de alifáticos y aromáticos disponibles, independientemente del sector en el que se hayan detectado. Las concentraciones consideradas se incluyen en la tabla siguientes.

Tabla 2.3 Concentraciones de TPHs para las muestras de las catas C-18 y C-21 de acuerdo al obtenido en la muestra de la C-01

Parámetro	Unidad	1208/C-01/S-0050	PORCENTAJE	REPARTO	REPARTO
fracción aromática >C16-C21	mg/kg	0,00	0,00	0,00	0,00
fracción aromática >C21-C35	mg/kg	160,00	0,70	584,35	104,35
fracción alifática >C10-C12	mg/kg	0,00	0,00	0,00	0,00
fracción alifática >C12-C16	mg/kg	0,00	0,00	0,00	0,00
fracción alifática >C16-C21	mg/kg	0,00	0,00	0,00	0,00
fracción alifática >C21-C35	mg/kg	68,00	0,30	248,35	44,35
TOTAL	mg/kg	230,00	1,00	840,00	150,00

MUESTRA C-18 MUESTRA C-21

Tabla 2.4 Concentraciones de TPHs para la muestra de la cata C-39 de acuerdo al obtenido en la muestra de la C-17

Parámetro	Unidad	1208/C-17/S-0020	PORCENTAJE	REPARTO
fracción aromática >C16-C21	mg/kg	63	0,03	1,73
fracción aromática >C21-C35	mg/kg	460	0,23	12,65
fracción alifática >C10-C12	mg/kg	0	0,00	0,00
fracción alifática >C12-C16	mg/kg	0	0,00	0,00
fracción alifática >C16-C21	mg/kg	183	0,09	5,03
fracción alifática >C21-C35	mg/kg	1300	0,65	35,75
TOTAL	mg/kg	2000,00	1,00	55,00

MUESTRA C-39

En el caso de la muestra C-38, se han obtenido concentraciones mayores en la analítica de TPHs totales respecto a la de fraccionamiento de alifáticos y aromáticos, por lo que se ha realizado la extrapolación para la concentración más alta.

Tabla 2.5 Concentraciones de TPHs para la muestra de la cata C-38 de acuerdo al obtenido en la muestra de la S-38

Parámetro	Unidad	1208/S-38/S-0015	PORCENTAJE	REPARTO
fracción aromática >C16-C21	mg/kg	68,00	0,00	92,95
fracción aromática >C21-C35	mg/kg	4.900,00	0,24	6.697,71
fracción alifática >C10-C12	mg/kg	3,60	0,00	4,92
fracción alifática >C12-C16	mg/kg	33,00	0,00	45,11
fracción alifática >C16-C21	mg/kg	480,00	0,02	656,10
fracción alifática >C21-C35	mg/kg	15.000,00	0,73	20.503,21
TOTAL	mg/kg	20.484,60	1,00	28.000,00

MUESTRA C-38

2.2 Descripción del medio

El perfil litológico tipo identificado durante las perforaciones fue el siguiente:

SECTOR 1:

- De 0,00 a 0,05 / 0,30 m.b.n.s.: Losa de hormigón que varía desde los 0,05 m a 0,30 m dependiendo del sondeo.
- De 0,05 / 0,30 a 0,50 / 0,60 m.b.n.s.: Gravas sueltas color gris. Este material se observa en los sondeos S-02, S-03, S-04, S-05, S-09, S-10, S-12, S-19 y S-21. En el resto de sondeos a estas profundidades se observan limos arenosos/arcillosos color marrón con alguna grava y cantos dispersos.
- De 0,90 / 1,20 a 2,0 m.b.n.s.: Dependiendo del sondeo encontramos arenas y cantos con escasa matriz o limos arenosos con cantos y gravas.
- De 2,00 a 4,00 m.b.n.s.: Limos arenosos con cantos y gravas color marrón. Entre estos estratos aparece una costra calcárea a distinta cota dependiendo del sondeo.
- De 4,00 a 9,20 m.b.n.s.: El punto PZ-01 se perfora hasta los 32 m de profundidad. Intercalaciones de limos arenosos y limos arcillosos con algún canto disperso.
- De 9,20 a 10,25 m.b.n.s.: Costra calcárea de color gris.
- 10,25 a 14,00 m.b.n.s.: Limos arenosos con algún canto disperso y alguna capa de costra calcárea centimétrica a decamétrica.
- De 14,00 a 32,00 m.b.n.s.: Limos arcillosos y arcillas limosas con alguna grava dispersa color marrón verdoso.

SECTOR 2:

- De 0,00 a 0,20 / 0,30 m.b.n.s.: Losa de hormigón que varía desde los 0,20 m y 0,30 m. En el sondeo S-28 a esta profundidad se observan cantos y gravas y a continuación aparece la losa de hormigón hasta los 0,70 m.
- De 0,20 / 0,30 a 0,80 / 2,30 m.b.n.s.: Arenas finas color marrón con cantos y gravas. Se observa un tramo de costa calcárea aproximadamente entre los 0,80 y 2,30 en los sondeos S-26 y S-27. En el S-31 se detectan unas gravas con matriz arenosa entre 0,20 m y 1,20 m.
- De 0,80 / 2,30 a 4,0 m.b.n.s.: Limos arenosos color marrón con algún canto y gravas dispersas.
- En la zona del parking municipal se ha detectado una primera capa de relleno antrópico formado por arenas finas, limos arenosos, restos de ladrillo, cantos y gravas dispersas con una profundidad que va desde los 0,60 m en el S-40 hasta los 2,00 m en el S-44.

SECTOR 3:

- De 0,00 a 0,05 / 0,70 m.b.n.s.: Losa de asfalto y algún bloque de hormigón que va desde los 0,05 m en la C-19 a los 0,70 en la C-47. Esta capa no aparece en todas las calicatas.
- De 0,05 / 0,70 a 0,70 / 2,10 m.b.n.s.: Arenas limosas con cantos y gravas. Algunas de las calicatas finalizan entre profundidades de 0,70 y 2,40 debido a la aparición de una capa de costra calcárea.
- De 0,70 / 2,10 a 4,00 m.b.n.s.: Limos arenosos con cantos y gravas dispersos. En la C-47, C-48 y C-49 aparecen limos arcillosos con algún canto disperso.

2.3 Descripción de los receptores

El análisis de riesgos cuantitativo se ha llevado a cabo teniendo en cuenta las siguientes premisas:

- La investigación y análisis de riesgos se realiza en el marco de la redacción de la Modificación Puntual del Pla Director Urbanístic (PDU) del ARE Montesa y pretende evaluar la compatibilidad de los usos contemplados en dicha modificación.
- No se tomarán medidas de remediación en el emplazamiento.
- Los usos futuros considerados son los siguientes:
 - **Uso residencial con viviendas en altura y con una planta de aparcamiento subterráneo** que implica la excavación de al menos 3 metros del terreno existente. Esta excavación supone la eliminación del foco de contaminación, que en todos los sectores y subsectores en los que se ha planeado este uso se ha detectado afección hasta 1 o 1.5 m de profundidad. Los receptores considerados para este uso, sería niños y adultos residentes, en interior.

- **Uso equipamientos:** este futuro uso contempla dos posibilidades diferentes:
 - **Uso intermedio:** previo a la construcción del futuro equipamiento, los subsectores que tendrán este tipo de uso estarán vallados y sin pavimentar. Operarios de mantenimiento pueden realizar visitas esporádicas, por lo que se ha considerado un operario que pasa 4 horas al mes en la parcela, la cual se encuentra sin pavimentar. Las vías de exposición relevantes serían: contacto directo (contacto dérmico e ingestión accidental de suelo) e inhalación de volátiles procedentes del suelo.
 - **Uso equipamientos futuro:** pueden desarrollarse usos escolares o culturales en cuyo caso, el terreno estará siempre pavimentado. En este caso, se considera como potencial receptor los niños que puedan estar en interior en una guardería, unas 12 horas diarias durante 350 días al año. La vía de exposición es la inhalación de volátiles en interior.
- **Uso Zonas verdes:** en algunos de los sectores se incluirán zonas verdes en cuyo caso podría excavarse parte de los terrenos. Independientemente de si se excavan o no, en estas zonas de dispondrá una capa de tierra vegetal de 30 cm cubriendo el terreno actual. En este caso, los receptores son los niños usuarios de las zonas verdes, los cuales pueden verse expuestos a los volátiles del suelo por inhalación en exterior.
- **Uso Construcción:** durante el proceso de desarrollo, la fase de construcción implicará la presencia de trabajadores durante el periodo de tiempo que dure la misma. Se tiene en cuenta por tanto un trabajador de la construcción que estará en el emplazamiento durante un mes (20 días laborables) que dure la fase de excavación. Las vías de exposición relevantes serían: contacto directo (contacto dérmico e ingestión accidental de suelo) e inhalación de volátiles procedentes del suelo.

Por otro lado, no se ve como probable la existencia de receptores ecológicos, ya que las instalaciones están valladas y pavimentadas en su práctica totalidad y se localizan en un medio fuertemente antropizado.

2.4 Escenarios de exposición

Teniendo en cuenta todas las premisas anteriores, se definen los siguientes escenarios para los que se evaluará el riesgo en los diferentes sectores y subsectores:

Tabla 2.6 Escenarios considerados en el SECTOR 1

SECTOR	SUBSECTOR	Foco	Medio	Localización	Sondeos	Profundidad	USOS DEL SUELO	RECEPTOR
1	Montesa	1	Suelo	Zona Oeste	S-23, S-24, S-14, S-15, S-16, S-17, S-22	desde 0 a 1 m	Viviendas con parking	Ninguno - Se elimina el foco al excavar
							Equipamientos intermedio	Trabajador de mantenimiento
							Equipamientos futuro	Niños usuarios de futura guardería
		2	Suelo	Zona Central	S-08	desde 0 a 1 m	Zonas verdes	Niños usuarios
							Construcción	Trabajador de la construcción
							Equipamientos	Trabajador de mantenimiento
		3	Suelo	Zona Este	S-03, C-01, C-05	desde 0 a 1 m	Equipamientos futuro	Niños usuarios de futura guardería
							Construcción	Trabajador de la construcción
							Viviendas con parking	Ninguno - Se elimina el foco al excavar
							Zonas verdes	Niños usuarios
							Construcción	Trabajador de la construcción

SECTOR	SUBSECTOR	Foco	Medio	Localización	Sondeos	Profundidad	USOS DEL SUELO	RECEPTOR
	Montesita	1	Suelo	Fundición	S-38	desde 0 a 1 m	Viviendas con parking	Ninguno - Se elimina el foco al excavar
							Construcción	Trabajador de la construcción
							Equipamientos	Trabajador de mantenimiento
		2	Suelo	Suelo profundo en la zona del tanque	S-35	desde 1 m a 5 m	Viviendas con parking	Ninguno - Se elimina el foco al excavar
							Equipamientos	Trabajador de mantenimiento
							Equipamientos futuro	Niños usuarios de futura guardería
		3	Suelo	Suelo superficial general	C-10, C-17, C-18, C-08, C-07, C-06	desde 0 a 1 m	Construcción	Trabajador de la construcción
							Equipamientos	Trabajador de mantenimiento
							Equipamientos futuro	Niños usuarios de futura guardería
							Zonas verdes	Niños usuarios
							Construcción	Trabajador de la construcción

Tabla 2.7 Escenarios considerados en el SECTOR 2 y el SECTOR 3

SECTOR	SUBSECTOR	Foco	Medio	Localización	Sondeos	Profundidad	USOS DEL SUELO	RECEPTOR
2	Aparcamiento municipal	1	Suelo	Suelo superficial general	S-40, S-43, S-44	desde 0 a 1 m	Viviendas con parking	Ninguno - Se elimina el foco al excavar
	COPISA	1	Suelo	Suelo superficial general	C-11, C-13, C-15, S-27	desde 0 a 1 m	Zonas verdes	Niños usuarios
							Construcción	Trabajador de la construcción
3	Aparcamiento Rayo	1	Suelo	Suelo superficial general	C-31, C-33, C-34, C-35, C-39, C-42, C-43	desde 0 a 1 m	Viviendas con parking	Ninguno - Se elimina el foco al excavar
							Equipamientos	Trabajador de mantenimiento
							Equipamientos futuro	Niños usuarios de futura guardería
							Zonas verdes	Niños usuarios
							Construcción	Trabajador de la construcción
							Construcción	Trabajador de la construcción
	Aparcamiento Pompeu Fabra	1	Suelo	Suelo superficial general	C-19, C-21	desde 0 a 1 m	Zonas verdes	Ninguno - Se elimina el foco al excavar
							Equipamientos	Trabajador de mantenimiento
							Equipamientos futuro	Niños usuarios de futura guardería
							Construcción	Trabajador de la construcción

3 Valoración de riesgos

Con los datos recopilados en las fases de investigación y caracterización, y asumiendo las premisas expuestas en el modelo conceptual, se ha llevado a cabo el análisis de riesgos para los escenarios ya mencionados. Este análisis de riesgos se ha estructurado en etapas sucesivas, tal como se expone a continuación.

3.1 Análisis de la toxicidad

La evaluación de la toxicidad de los contaminantes de interés conlleva la recopilación de datos toxicológicos en fuentes de reconocido prestigio, tales como W.H.O., I.A.R.C., U.S.EPA, E.A.A. El análisis de riesgo ha utilizado los datos toxicológicos incluidos dentro de la aplicación *RBCA 2.6 (Spence & Walden, 2001)*, los cuales provienen de las fuentes citadas, habiéndose chequeado a fecha de realización del presente informe las posibles actualizaciones de dichos datos.

En el caso que se trata, los contaminantes cancerígenos detectados son el plomo (CaEPA), el benzo(a)pireno, el bis(2-etilhexil)ftalato y el butilbenzilftalato. Los parámetros toxicológicos recopilados se adjuntan en el **Anexo 1**.

3.2 Análisis de exposición

Para llevar a cabo el análisis de la exposición se ha empleado la aplicación informática *RBCA Tool Kit for Chemical Releases (Groundwater Services, 2000)*, basada en la metodología desarrollada en el documento "*Standard Guide for Risk-Based Corrective Action*" (ASTM, 2000).

Además, para calcular las ingestas de contaminantes para cada receptor se requiere información sobre las características de los medios afectados y del emplazamiento en cuestión, los cuales se han intentado aproximar lo máximo posible a la situación real.

La aplicación utilizada para el cálculo de riesgo (*RBCA 2.6*) incorpora modelos contrastados para cuantificar el transporte y la transferencia de contaminantes en los medios de contacto (agua subterránea, aire intersticial del suelo, aire interior). Dichos modelos estiman las concentraciones transferidas a partir de las concentraciones en la fuente utilizando este valor para el cálculo de riesgo de forma que se apliquen las condiciones más desfavorables.

Para la cuantificación de la volatilización desde el suelo se han utilizado los modelos incorporados en el *RBCA* (Johnson and Ettinger 1991 combinado con flujo de masas).

En cuanto a los receptores tipo, a cada uno se le asigna una pauta de exposición a los contaminantes asociados al uso del suelo correspondiente. Cuando no se ha dispuesto de información específica al respecto, dichos parámetros de exposición se han asimilado a valores por

defecto contrastados que son representativos de exposición en condiciones desfavorables, denominadas RME (*Reasonable Maximum Exposure*). En la Tabla 3.1 se recogen los principales parámetros de exposición para los receptores de interés.

Tabla 3.1 Resumen de parámetros de exposición

Parámetro	Equipamientos	Equipamientos	Zonas verdes	Trabajador
	Intermedio Trabajador	Niño Guardería	Niño	Construcción
Peso medio (kg)	70	15	15	70
Esperanza de vida (años)	70	6	6	70
Tasa de Inhalación exterior (m ³ /h)	2,5	--	2,5	2,5
Tasa de Inhalación interior (m ³ /h)	--	0,83	--	--
Frecuencia de exposición al aire exterior (nº eventos/año)	20	350	350	20
Duración de la exposición (años)	1	6	6	1
Tiempo de exposición (h/día)	8	12	12	8

No se considera como potencial receptor los residentes en las futuras viviendas de los diferentes sectores que incluyen este uso, ya que durante la excavación de la planta de aparcamiento subterráneo se eliminará el foco de contaminación identificado y por tanto, no existe ruta de exposición entre foco y receptor.

El único foco identificado a más profundidad, es el Foco 2 del Sector 1 – Montesita, en el cual no está proyectado ningún uso residencial. Los parámetros de entrada para la exposición se recogen en el **Anexo 1**.

3.3 Cuantificación y evaluación del riesgo

El nivel de riesgo por exposición a sustancias cancerígenas (riesgo cancerígeno - R) se representa como un incremento de la probabilidad de contraer cáncer, mientras que el nivel de riesgo por exposición a sustancias no cancerígenas (tasa o índice de riesgo - HQ) se representa como una proporción entre la dosis de exposición y la dosis de referencia para un contaminante dado.

El índice de riesgo viene dado por la expresión siguiente:

$$R_{ij} = I_{ij} \times FP_{ij}, \text{ ó } HQ_{ij} = I_{ij} / DR_{ij}, \text{ dónde:}$$

R_{ij} : Índice de riesgo (cancerígeno) resultante de la exposición durante toda la vida (70 años) a un contaminante cancerígeno (i) y ruta (j) determinados.

HQ_{ij} : Índice de riesgo sistémico resultante de la exposición al contaminante (i) a través de la vía (j).

I_{ij} : Ingesta media diaria del contaminante (i) a través de la vía (j) promediada para el periodo de exposición evaluado (mg/kg . día).

FP_{ij} : factor pendiente para el contaminante y ruta de exposición considerados (mg/kg.día)⁻¹.

DR_{ij} : dosis de referencia toxicológica para el contaminante (i) y la vía (j) correspondiente al periodo de exposición evaluado (mg/kg . día).

La evaluación de los índices de riesgo obtenidos se realiza de acuerdo con los criterios establecidos en el RD 9/2005, el cual define como criterios de admisibilidad del riesgo un límite de 1 para contaminantes con efectos sistémicos y de 10⁻⁵ para contaminantes cancerígenos.

En el cuadro siguiente se presenta un resumen de los resultados obtenidos. Según los resultados obtenidos, **el riesgo se considera ACEPTABLE en todos los escenarios evaluados.**

Los valores máximos de riesgo obtenidos son de 10⁻⁰³ para riesgo sistémico (tres órdenes de magnitud por debajo del umbral de admisibilidad) en aquellos escenarios en los que el receptor se expone directamente al suelo, como pueden ser los trabajadores de la construcción o los de mantenimiento intermedio. Este índice de riesgo aparece en aquellos escenarios con contacto directo y con presencia de antimonio o TPHs.

En el caso del índice de riesgo cancerígeno, los valores más altos obtenidos son de 10⁻⁰⁷ respecto al umbral máximo de admisibilidad de 10⁻⁰⁵ (el riesgo obtenido es dos órdenes de magnitud por debajo del umbral máximo de admisibilidad). Estos valores se obtienen en aquellos escenarios en los que están presentes contaminantes como los PCBs, el benzo(a)pireno o el plomo.

Los resultados completos de los cálculos de riesgos se recogen en el **Anexo 2**.

Tabla 3.2 Resultados de riesgo en el SECTOR 1 - MONTESA

SECTOR 1 - MONTESA			Foco 1		Foco 2		Foco 3	
Escenario	Receptor	Vía de exposición	Zona Oeste		Zona Central - PCBs		Zona Este	
			R. Sist.	R. Cancer.	R. Sist.	R. Cancer.	R. Sist.	R. Cancer.
1.1	Equipamientos (Niño Guardería)	Inhalación volátiles	8,78E-04	1,90E-12	0,00E+00	9,05E-09	ND	ND
		Inhalación volátiles	1,90E-06	4,00E-11	0,00E+00	6,10E-09	ND	ND
	Contacto directo	7,80E-07	6,40E-08	6,40E-03	9,20E-08	ND	ND	
1.2	Zonas verdes	Inhalación volátiles	9,40E-06	2,40E-10	ND	ND	0,00E+00	0,00E+00
1.3	Trabajador Construcción	Inhalación volátiles	1,00E-04	1,60E-09	0,00E+00	2,60E-07	0,00E+00	0,00E+00
		Contacto directo	4,60E-06	5,30E-08	3,70E-02	2,10E-08	2,10E-03	0,00E+00

R. Sist.: Índice de Riesgos Sistémico

R. Cancer.: Índice de Riesgo Cancerígeno

ND: Índice de riesgo no disponible al no existir este uso sobre el foco correspondiente

Tabla 3.3 Resultados de riesgo en el SECTOR 1 - MONTESITA

SECTOR 1 - MONTESITA			Foco 1		Foco 2		Foco 3	
Escenario	Receptor	Vía de exposición	Fundición		Suelo profundo - Zona tanque		Suelo superficial general	
			R. Sist.	R. Cancer.	R. Sist.	R. Cancer.	R. Sist.	R. Cancer.
1.1	Equipamientos (Niño Guardería)	Inhalación volátiles	ND	ND	0,00E+00	0,00E+00	4,0E-3	0,00E+00
	Equipamientos (Mantenimiento)	Inhalación volátiles	ND	ND	0,00E+00	0,00E+00	1,40E-05	0,00E+00
		Contacto directo	ND	ND	4,60E-03	3,30E-08	3,40E-04	2,40E-08
1.2	Zonas verdes	Inhalación volátiles	ND	ND	ND	ND	6,90E-05	0,00E+00
1.3	Trabajador Construcción	Inhalación volátiles	1,20E-03	0,00E+00	0,00E+00	0,00E+00	7,50E-04	0,00E+00
		Contacto directo	6,90E-02	1,20E-09	3,30E-02	8,80E-09	2,00E-03	6,40E-09

R. Sist.: Índice de Riesgos Sistemático

R. Cancer.: Índice de Riesgo Cancerígeno

ND: Índice de riesgo no disponible al no existir este uso sobre el foco correspondiente

Tabla 3.4 Resultados de riesgo en el SECTOR 2 - COPISA

SECTOR 2 - COPISA			Foco 1	
Escenario	Receptor	Vía de exposición	Suelo superficial general	
			R. Sist.	R. Cancer.
1.1	Equipamientos (Niño Guardería)	Inhalación volátiles	0,00E+00	9,50E-12
	Equipamientos (Mantenimiento)	Inhalación volátiles	0,00E+00	2,40E-10
		Contacto directo	7,20E-04	2,50E-07
1.2	Zonas verdes	Inhalación volátiles	0,00E+00	1,20E-09
1.3	Trabajador Construcción	Inhalación volátiles	0,00E+00	8,20E-09
		Contacto directo	4,80E-03	5,90E-08

R. Sist.: Índice de Riesgos Sistemático

R. Cancer.: Índice de Riesgo Cancerígeno

ND: Índice de riesgo no disponible al no existir este uso sobre el foco correspondiente

Tabla 3.5 Resultados de riesgo en el SECTOR 2 – PARQUING MUNICIPAL

SECTOR 2 – PARQUING MUNICIPAL			Foco 1	
Escenario	Receptor	Vía de exposición	Suelo superficial general	
			R. Sist.	R. Cancer.
1.1	Zonas verdes	Inhalación volátiles	0,00E+00	8,70E-10
1.2	Trabajador Construcción	Inhalación volátiles	0,00E+00	6,00E-09
		Contacto directo	2,30E-03	5,50E-08

R. Sist.: Índice de Riesgos Sistemático

R. Cancer.: Índice de Riesgo Cancerígeno

Tabla 3.6 Resultados de riesgo en el SECTOR 3 – PARQUING RAYO

SECTOR 3 – PARQUING RAYO			Foco 1	
Escenario	Receptor	Vía de exposición	Suelo superficial general	
			R. Sist.	R. Cancer.
1.1	Equipamientos (Niño Guardería)	Inhalación volátiles	0,00E+00	0,00E+00
	Equipamientos (Mantenimiento)	Inhalación volátiles	0,00E+00	0,00E+00
		Contacto directo	5,10E-04	7,40E-09
1.2	Zonas verdes	Inhalación volátiles	0,00E+00	0,00E+00
1.3	Trabajador Construcción	Inhalación volátiles	0,00E+00	0,00E+00
		Contacto directo	3,60E-03	1,90E-09

R. Sist.: Índice de Riesgos Sistemático

R. Cancer.: Índice de Riesgo Cancerígeno

Tabla 3.7 Resultados de riesgo en el SECTOR 3 – PARQUING POMPEU FABRA

SECTOR 3 – PARQUING POMPEU FABRA			Foco 1	
Escenario	Receptor	Vía de exposición	Suelo superficial general	
			R. Sist.	R. Cancer.
1.1	Equipamientos (Niño Guardería)	Inhalación volátiles	0,00E+00	0,00E+00
	Equipamientos (Mantenimiento)	Inhalación volátiles	0,00E+00	0,00E+00
		Contacto directo	3,9E-4	1,9E-8
1.2	Zonas verdes	Inhalación volátiles	0,00E+00	0,00E+00
1.3	Trabajador Construcción	Inhalación volátiles	0,00E+00	0,00E+00
		Contacto directo	9,1E-4	3,3E-9

R. Sist.: Índice de Riesgos Sistemático

R. Cancer.: Índice de Riesgo Cancerígeno

3.4 Análisis de incertidumbres

La evaluación cuantitativa de riesgos para la salud humana llevada a cabo anteriormente incorpora un conjunto de incertidumbres que es preciso señalar y valorar, siquiera cualitativamente, con el fin de situar las conclusiones y posterior toma de decisiones en un contexto adecuado.

Dando por sentado que la metodología aplicada en este caso se encuentra suficientemente contrastada por organismos reconocidos tanto a nivel nacional como internacional, las incertidumbres derivadas de su aplicación pueden clasificarse en función del aspecto a que hacen referencia. A este respecto, se comentan seguidamente aquellos elementos del análisis de riesgos que pueden plantear discusión:

- **Incertidumbres asociadas a los modelos de transporte utilizados.** Cualquier modelización de un fenómeno complejo supone la simplificación del mismo, lo cual puede generar incertidumbre acerca de la validez de los resultados que proporciona. Por otra parte, en ausencia de datos medidos en la realidad, la modelización constituye una herramienta imprescindible para aproximarse a la magnitud del problema.

La modelización de procesos de contaminación ambiental ha adquirido un grado de desarrollo suficiente como para hacer fiable los resultados de su aplicación siempre que se cuente con una información de partida mínima y se seleccione el modelo adecuado para la problemática a estudiar, los datos disponibles y el grado de aproximación deseado.

En el análisis de riesgos objeto de este estudio se han aplicado diversos modelos matemáticos como herramienta para calcular las concentraciones de contaminantes a que estarían expuestos los individuos a través de diversas vías.

En todos los casos, se han utilizado los modelos que dispone la herramienta informática utilizada (*RBCA 2.6 Toolkit for Chemical Releases*). En aquellos casos que ha sido posible incorporar información específica del emplazamiento se han adoptados estos valores y sólo cuando no se disponía de información específica se han adoptado los valores que, por defecto, proporciona el programa. En cualquier caso, estos modelos son simples y, por ello, tienden a ser conservadores.

- **Incertidumbres asociadas a la adopción de valores estadísticamente seguros,** tanto para los parámetros que definen las pautas de comportamiento de un determinado grupo de riesgo (duración y frecuencia de la exposición) como para los que condicionan el valor de la ingesta unitaria de contaminantes por las diferentes vías (peso corporal, tasa respiratoria, etc.)

Los parámetros de exposición utilizados se han escogido aplicando el criterio de máxima exposición razonable (RME), lo que proporciona resultados conservadores para situaciones operacionales normales. El efecto de la elección de estos valores repercute en una sobreestimación del nivel de riesgo.

- **Incertidumbres asociadas a los efectos toxicológicos de los contaminantes implicados,** la magnitud de las relaciones dosis-respuesta, el tipo de efecto previsible sobre la salud humana, etc.

Es evidente que, a pesar de los avances científicos y los esfuerzos en materia de investigación, a día de hoy no son conocidos todos los efectos que sobre la salud humana producen la multitud de sustancias (naturales o artificiales) a que la población humana está expuesta. Esta limitación produce una incertidumbre inherente a cualquier intento de cuantificar el riesgo para la salud de una población expuesta, por lo que tiene un carácter genérico y aplicable a todos los casos.

Asumiendo la limitación anterior, la forma de evitar en un caso concreto infravaloraciones o sobrevaloraciones de los riesgos objeto del análisis es adoptar la información toxicológica que sobre dosis de referencia está contenida en fuentes de reconocido prestigio.

Esta cuestión puede resultar problemática en la medida que excluye la valoración cuantitativa de los efectos de sustancias de cuya presencia se tiene constancia por el hecho de carecer de referencias toxicológicas adecuadas.

4 Conclusiones

De acuerdo con los resultados obtenidos en la valoración de riesgo en el escenario planteado para el emplazamiento de Montesa el riesgo obtenido es **ACEPTABLE**.

Esta evaluación del riesgo se ha llevado a cabo en condiciones bastante conservadoras. Por lo tanto, los niveles de riesgo son representativos de las condiciones más adversas desde un punto de vista realista.

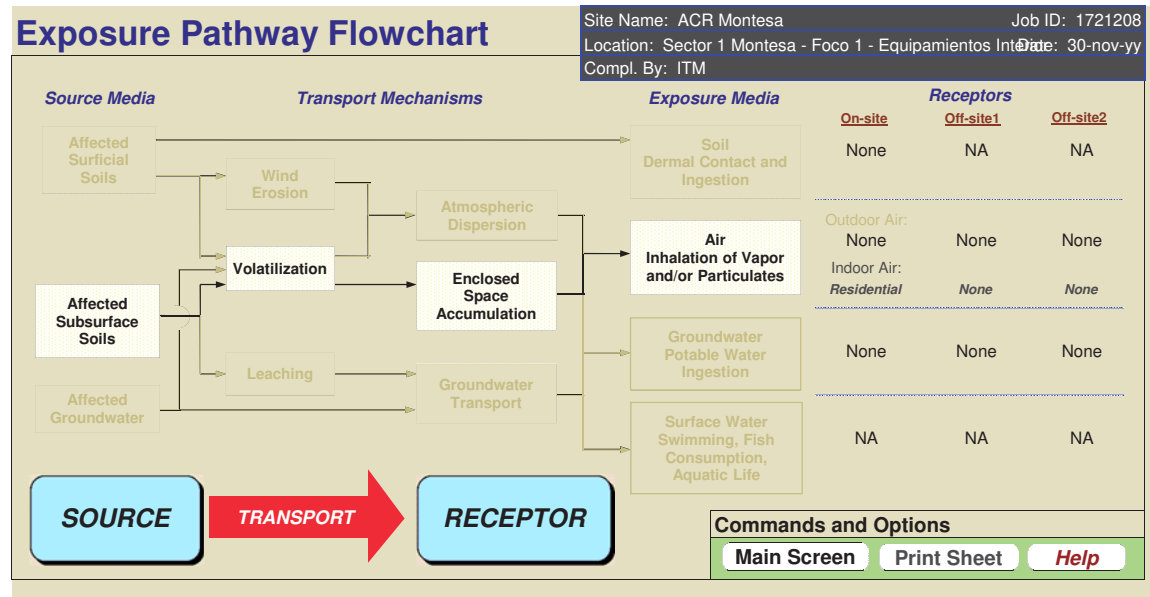
Es importante considerar que la presente valoración de riesgos se ha realizado con los resultados de la investigación del suelo realizadas entre mayo y octubre de 2018. Cualquier cambio relevante de las condiciones actuales del emplazamiento, tales como,

- futuros cambios de uso del suelo, o de las condiciones consideradas respecto a excavación, capas de cubrición, etc.
- actualización de dosis toxicológicas ,
- aumento o disminución de las concentraciones de contaminantes o de las fracciones de TPHs presentes en la mezcla de contaminantes, etc.

supondrían consecuentemente un cambio de la magnitud del riesgo, que debería ser revisado.

Anexo 1 **Parámetros de entrada**

SECTOR 1 - MONTESA



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))					
				TX11	TX11				TX11	TX11				
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+08	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	TX11	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Phenanthrene	85-01-8	O	178.2334	TX11	0.994	TX11	1.40E-02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Trichloroethane, 1,1,1-	71-55-6	O	133.40482	TX11	1330	TX11	1.71E+03	1.24E+02	TX11	7.15E-01	TX11	2.04E+00	Koc	TX11
Methylene bromide	74-95-3	O	173.83	TX11	11000	TX11	2.06E+04	4.56E+01	TX11	3.49E-02	TX11	2.26E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air		Water		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)		cm ² /s	cm ² /s	cm ² /s	cm ² /s	cm ² /s
Lead (inorganic)	-	-	-	-	-	-	7.29E+01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Benzo-g,h,i-perylene	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Phenanthrene	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Trichloroethane, 1,1,1-	-	-	-	-	-	-	2.68E+00	TX11	7.80E-02	TX11	8.80E-06	TX11
Methylene bromide	-	-	-	-	-	-	1.52E+00	TX11	8.00E-02	TX11	8.00E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters														
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Conc. Factor Calculated (mg/kg)/(mg/L)	Root Conc. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor		
	Groundwater (mg/L)		Soil (mg/kg)		Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
Lead (inorganic)	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-		
Benzo-a-pyrene	1.00E-02	S2	6.60E-01	S2	1.06E+03	1.06E+03	H	-	1.00E+00	TX11	2.05E+00	1.53E+03	26000	LY
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
Phenanthrene	1.00E-02	S2	6.60E-01	S2	4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.38E+00	6.78E+01	2630	LY
Trichloroethane, 1,1,1-	5.00E-03	S	5.00E-03	S	5.46E+02	5.46E+02	H	-	1.00E+00	TX11	2.22E+00	4.31E+00	9	LY
Methylene bromide	-	-	-	-	5.60E+01	5.60E+01	H	-	1.00E+00	TX11	8.14E-01	1.27E+00	8.4	LY

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Trichloroethane, 1,1,1-	0.017	0.57	1.4	0.031	0.07001968	D
Methylene bromide	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Trichloroethane, 1,1,1-	0	0	0.9	TX11
Methylene bromide	0	0	0.8	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards									
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values				
	MC	OS	OS	OS	Residential/Plant	Residential/Plant	Allotments	Commercial/Industrial	
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	0.2	MC	1900	OS	-	-	-	-	-
Methylene bromide	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-
Trichloroethane, 1,1,1-	-	-	-	-	0.2	T3	12.586	T3	8.391	T3
Methylene bromide	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	125	125	125	NA	6	180	-
EFD Exposure frequency for dermal exposure	125	125	125	NA	6	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.733	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.317	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	None	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	Residential	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	NA	NA	NA	(m)
Indoor air inhalation receptor	0	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	NA
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m³)		Oral Equivalent Slope Factor 1/(mg/kg-day)		Dermal Equivalent Slope Factor 1/(mg/kg-day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m³)	
	Lead (inorganic)	-	-	-	-	-	-	0.0065	-	-	0.00072	-
Benzo-a-pyrene	-	-	-	-	-	-	7.3	EPA-I	7.3	D2	0.00088	TX11
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	2	EPA-I	2	D2	5	EPA-I	-	-	-	-	-	-
Methylene bromide	0.06	TX11	0.06	D2	0.004	TX11	0.0075	TX11	0.0075	D2	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior Completed By: ITM Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
	<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w Volumetric water content	0,369	(-)
θ_a Volumetric air content	0,041	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
k_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH Soil/groundwater pH	6,8	(-)
W Length of source-zone area parallel to wind	NA	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	NA	(m)
A Source zone area	NA	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1	(m)
L_{subs} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	NA	(m/s)
h_{air} Air mixing zone height	NA	(m)
Q/C Inverse mean concentration at the center of source	NA	
P_a Areal particulate emission rate	NA	(g/cm ² /s)
V Fraction of vegetative cover	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x) Windspeed function dependent on Um/Ut	NA	
PEF Particulate Emission Factor	NA	

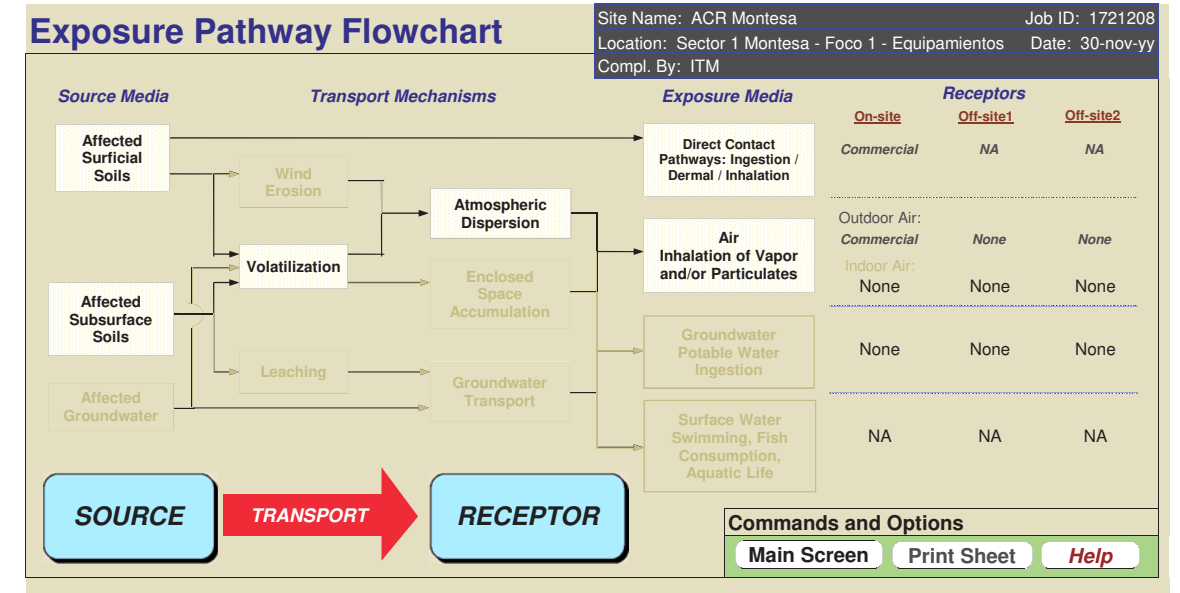
Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	2	NA	(m)
A_b Foundation area	70	NA	(m ²)
X_{crk} Foundation perimeter	49	NA	(m)
ER Building air exchange rate	0,00014	NA	(1/s)
L_{crk} Foundation thickness	0,15	NA	(m)
Z_{crk} Depth to bottom of foundation slab	0,15	NA	(m)
η Foundation crack fraction	0,001	NA	(-)
dP Indoor/outdoor differential pressure	0	NA	(g/cm/s ²)
Q_s Convective air flow through slab	0	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	0,12	NA	(-)
θ_{acrack} Volumetric air content of cracks	0,26	NA	(-)
BV Building Volume	NA	NA	(m ³)
W Building Width Perpendicular to GW flow	NA	NA	(m)
L Building Length Parallel to GW flow	NA	NA	(m)
V Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters	Value	(Units)
δ_{gw} Groundwater mixing zone depth	NA	(m)
I_f Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i Groundwater gradient	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat} Groundwater pH	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{pl} Width of GW plume at SW discharge	NA	(m)
δ_{pl} Thickness of GW plume at SW discharge	NA	(m)
DF _{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)		Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))		
				(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mm Hg)	(mm Hg)	(unitless)	(unitless)	(log(L/kg))	(log(L/kg))	
<i>Change - One or more parameter differs from User Chemical Database</i>														
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	TX11	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Phenanthrene	85-01-8	O	178.2334	TX11	0.994	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Trichloroethane, 1,1,1-	71-85-6	O	133.40482	TX11	1330	TX11	1.71E+03	1.24E+02	TX11	7.15E-01	TX11	2.04E+00	Koc	TX11
Methylene bromide	74-95-3	O	173.83	TX11	11000	TX11	2.06E+04	4.56E+01	TX11	3.49E-02	TX11	2.26E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																	
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics													
				Surface Soil Column			Water Bearing Unit			log(Kow) (@ 20 - 25 C) (log(L/kg))	Diffusion Coefficients						
				Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)		Air (cm ² /s)	Water (cm ² /s)	Air (cm ² /s)	Water (cm ² /s)			
<i>Change - One or more parameter differs from User Chemical Database</i>																	
Lead (inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	-	-	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	-	-	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Phenanthrene	85-01-8	O	178.2334	-	-	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Trichloroethane, 1,1,1-	71-85-6	O	133.40482	-	-	-	-	-	-	-	-	2.68E+00	TX11	7.60E-02	TX11	8.80E-06	TX11
Methylene bromide	74-95-3	O	173.83	-	-	-	-	-	-	-	-	1.52E+00	TX11	8.00E-02	TX11	8.00E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters													
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor			
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)							
Leaf (Inorganic)	-	-	-	-	-	-	-	-	-	-	-	-	
Benzo-a-pyrene	1.00E-02	S2 6.60E-01	S2 1.06E+03	1.06E+03	H	-	-	1.00E+00 TX11 2.06E+00	1.53E+03	26000	LY		
Benzo-g,h,i-perylene	1.00E-02	S2 6.60E-01	S2 1.30E+03	1.30E+03	H	-	-	1.00E+00 TX11 8.06E-01	4.33E+03	72000	LY		
Phenanthrene	1.00E-02	S2 6.60E-01	S2 4.00E+02	4.00E+02	H	-	-	1.00E+00 TX11 6.38E+00	6.78E+01	2630	LY		
Trichloroethane, 1,1,1-	5.00E-03	S 5.00E-03	S 5.46E+02	5.46E+02	H	-	-	1.00E+00 TX11 2.22E+00	4.31E+00	9	LY		
Methylene bromide	-	-	-	5.60E+01	5.60E+01	H	-	-	1.00E+00 TX11 8.14E-01	1.27E+00	8.4	LY	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Leaf (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Trichloroethane, 1,1,1-	0.017	0.57	1.4	0.031	0.070011969	D
Methylene bromide	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
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 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
		0.01	0.15	
Lead (inorganic)	0.06666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Trichloroethane, 1,1,1-	0	0	0.9	TX11
Methylene bromide	0	0	0.8	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values					
			Residential/Pl ant	Residential/W o Plant	Allotments	Commercial/I n d.		
			mg/kg	mg/kg	mg/kg	mg/kg		
Lead (inorganic)	0.015	MC	50	OS	-	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	0.2	MC	1900	OS	-	-	-	-
Methylene bromide	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0189	T3
Benzo-a-pyrene	-	-	-	-	0.00099	T3	0.00081	T3	0.00054	T3
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-
Trichloroethane, 1,1,1-	-	-	-	-	0.2	T3	12.586	T3	8.391	T3
Methylene bromide	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)	
	Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072
Benzo-a-pyrene	-	-	-	-	-	-	7.3	EPA-I	7.3	D2	0.00088	TX11
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	2	EPA-I	2	D2	5	EPA-I	-	-	-	-	-	-
Methylene bromide	0.06	TX11	0.06	D2	0.004	TX11	0.0075	TX11	0.0075	D2	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	350	350	350	NA	6	180	-
EFD	350	350	350	NA	6	180	-
IRw	1	1	2	2.5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0.5	0.5	0.05	0.3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0.025	0.025	0.025	0.053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0.002	0.002	0.006	2.053	NA	NA	NA
IRabg	0.001	0.001	0.002	0.887	NA	NA	NA
VGbg	0.01	0.01	0.01	NA	NA	NA	NA
VGabg	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Commercial	NA	NA
Apply CLEA- UK SGV levels	No	No	No
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary: 0,369 vadose: 0,08 foundation: 0,12	(-)
θ_a Volumetric air content	0,041	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw}	NA	(m)
L_{ss}	1	(m)
A	2025	(m ²)
L_s	0	(m)
L_{base}	1	(m)
L_{sub}	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
z_{air} Air mixing zone height	2	(m)
Q/C	NA	(g/cm ² /s)
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	NA	(-)
U_m Mean annual airvelocity at 7m	NA	(-)
U_t Equivalent 7m air velocity threshold value	NA	(-)
F(x)	NA	(-)
PEF	6,9E-12	(-)

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

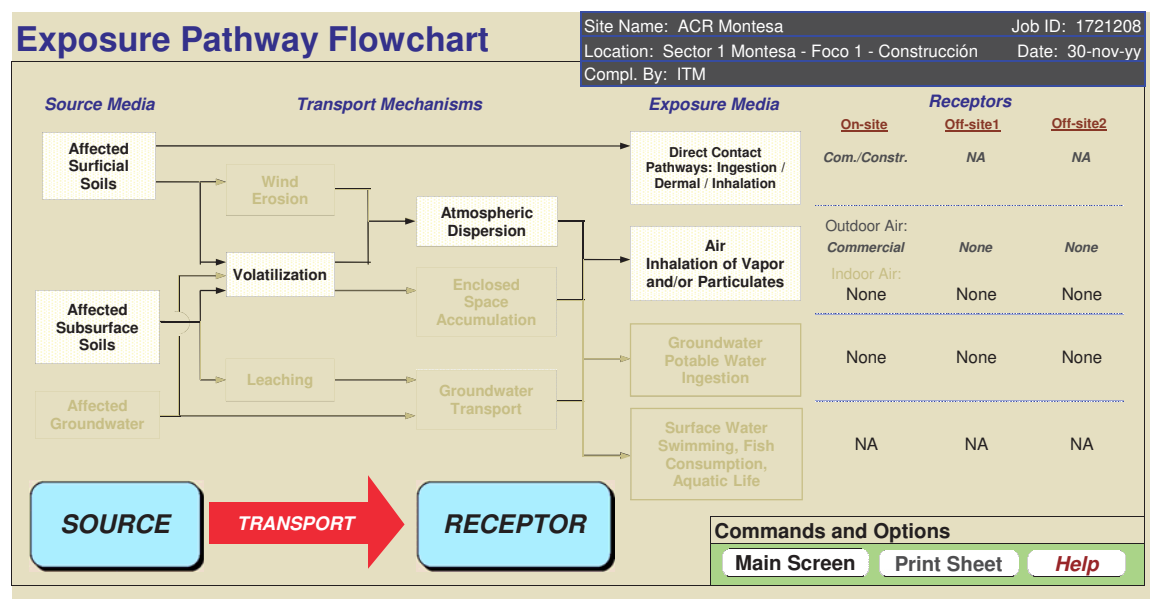
Groundwater Parameters	Value	(Units)
z_{gw} Groundwater mixing zone depth	NA	(m)
I_f Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	(-)

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport	Groundwater Ingestion		Groundwater to Indoor Air		
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport	Soil to Outdoor Air Inhal.		GW to Outdoor Air Inhal.		
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))					
				TX11	TX11				TX11	Kd	TX11			
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+08	0.00E+00	TX11	1.00E+00	Kd	TX11		
Benzo-a-pyrene	50-32-8	O	252.31528	TX11	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Phenanthrene	85-01-8	O	178.2334	TX11	0.994	TX11	1.40E-02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Trichloroethane, 1,1,1-	71-55-6	O	133.40482	TX11	1330	TX11	1.71E+03	1.24E+02	TX11	7.15E-01	TX11	2.04E+00	Koc	TX11
Methylene bromide	74-95-3	O	173.83	TX11	11000	TX11	2.06E+04	4.56E+01	TX11	3.49E-02	TX11	2.26E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air		Water		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)		cm ² /s	cm ² /s	cm ² /s	cm ² /s	cm ² /s
Lead (inorganic)	-	-	-	-	-	-	7.29E+01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Benzo-g,h,i-perylene	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Phenanthrene	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Trichloroethane, 1,1,1-	-	-	-	-	-	-	2.68E+00	TX11	7.80E-02	TX11	8.80E-06	TX11
Methylene bromide	-	-	-	-	-	-	1.52E+00	TX11	8.00E-02	TX11	8.00E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters														
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Conc. Factor Calculated (mg/kg)/(mg/L)	Root Conc. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor		
	Groundwater (mg/L)		Soil (mg/kg)		Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
Lead (inorganic)	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-		
Benzo-a-pyrene	1.00E-02	S2	6.60E-01	S2	1.06E+03	1.06E+03	H	-	1.00E+00	TX11	2.05E+00	1.53E+03	26000	LY
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
Phenanthrene	1.00E-02	S2	6.60E-01	S2	4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.38E+00	6.78E+01	2630	LY
Trichloroethane, 1,1,1-	5.00E-03	S	5.00E-03	S	5.46E+02	5.46E+02	H	-	1.00E+00	TX11	2.22E+00	4.31E+00	9	LY
Methylene bromide	-	-	-	-	5.60E+01	5.60E+01	H	-	1.00E+00	TX11	8.14E-01	1.27E+00	8.4	LY

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Trichloroethane, 1,1,1-	0.017	0.57	1.4	0.031	0.07001968	D
Methylene bromide	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Trichloroethane, 1,1,1-	0	0	0.9	TX11
Methylene bromide	0	0	0.8	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards									
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values				
	MC	OS	MC	OS	Residential/Plant	Residential/Allotments	Commercial/Industrial	Residential/Plant	Residential/Allotments
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	0.2	MC	1900	OS	-	-	-	-	-
Methylene bromide	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-
Trichloroethane, 1,1,1-	-	-	-	-	0.2	T3	12.586	T3	8.391	T3
Methylene bromide	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	30	30	30	NA	250	30	-
EFD Exposure frequency for dermal exposure	30	30	30	NA	250	30	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.176	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.076	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters										
Constituent	Oral RID or TDSI (mg/kg/day)	Dermal RID or TDSI (mg/kg/day)	Inhalation Equivalent RIC or TCA (mg/m³)	Oral Equivalent Slope Factor 1/(mg/kg/day)	Dermal Equivalent Slope Factor 1/(mg/kg/day)	Inhalation Equivalent Unit Risk Factor 1/(µg/m³)				
Lead (inorganic)	-	-	-	0.0558	-	0.00072	-	-	-	-
Benzo-a-pyrene	-	-	-	7.3	EPA-I	7.3	D2	0.00088	TX11	-
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-
Trichloroethane, 1,1,1-	2	EPA-I	2	D2	5	EPA-I	-	-	-	-
Methylene bromide	0.06	TX11	0.06	D2	0.004	TX11	0.0075	TX11	0.0075	D2

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 1 - Construcción Completed By: ITM Date Completed: 30-nov-yy

Surface Soil Column Parameters		Value	(Units)
h_{cap}	Capillary zone thickness	NA	(m)
h_v	Vadose zone thickness	NA	(m)
ρ_s	Soil bulk density	1,7	(g/cm ³)
f_{oc}	Fraction organic carbon	0,01	(-)
θ_T	Soil total porosity	0,41	(-)
		<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w	Volumetric water content	0,369	(-)
θ_a	Volumetric air content	0,041	(-)
K_{vs}	Vertical hydraulic conductivity	864	(cm/d)
k_v	Vapor permeability	1E-12	(m ²)
L_{gw}	Depth to groundwater	NA	(m)
pH	Soil/groundwater pH	6,8	(-)
W	Length of source-zone area parallel to wind	45	(m)
W_{gw}	Length of source-zone area parallel to GW flow	NA	(m)
L_{ss}	Thickness of affected surface soils	1	(m)
A	Source zone area	2025	(m ²)
L_s	Depth to top of affected soils	0	(m)
L_{base}	Depth to base of affected soils	1,3	(m)
L_{sub}	Thickness of affected soils	1,3	(m)

Outdoor Air Parameters		Value	(Units)
U_{air}	Ambient air velocity in mixing zone	2,25	(m/s)
h_{air}	Air mixing zone height	2	(m)
Q/C	Inverse mean concentration at the center of source	NA	
P_a	Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_l	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependent on Um/Ut	NA	
PEF	Particulate Emission Factor	6,9E-12	

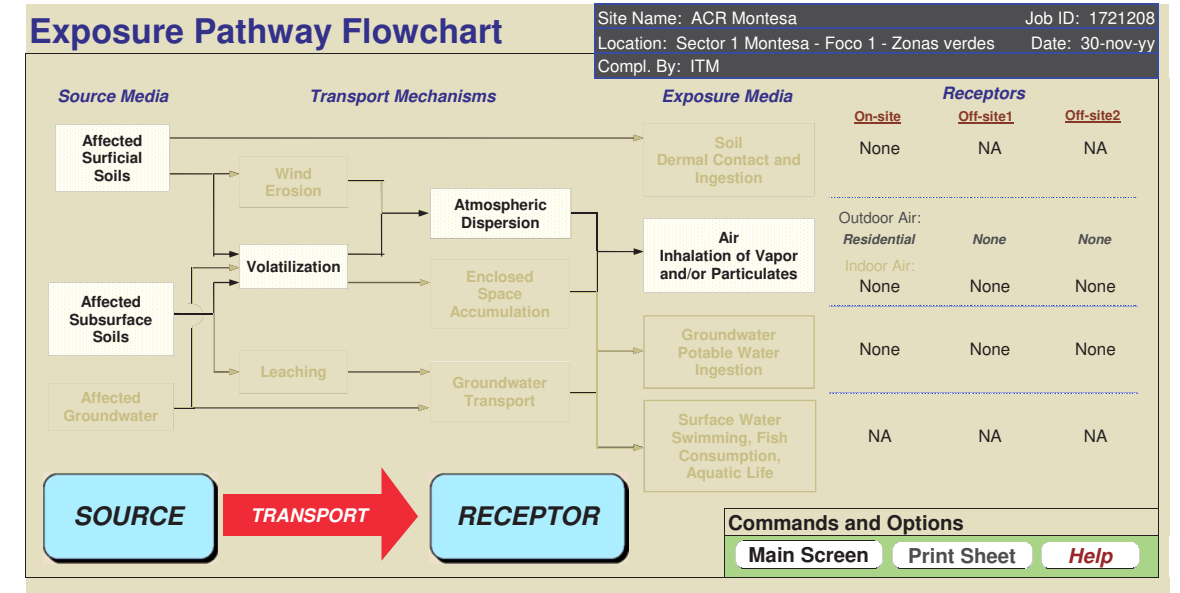
Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	NA	(m)
A_b	Foundation area	NA	NA	(m ²)
X_{crk}	Foundation perimeter	NA	NA	(m)
ER	Building air exchange rate	NA	NA	(1/s)
L_{crk}	Foundation thickness	NA	NA	(m)
Z_{crk}	Depth to bottom of foundation slab	NA	NA	(m)
η	Foundation crack fraction	NA	NA	(-)
dP	Indoor/outdoor differential pressure	NA	NA	(g/cm ² /s ²)
Q_s	Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	NA	NA	(-)
θ_{acrack}	Volumetric air content of cracks	NA	NA	(-)
BV	Building Volume	NA	NA	(m ³)
W	Building Width Perpendicular to GW flow	NA	NA	(m)
L	Building Length Parallel to GW flow	NA	NA	(m)
V	Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	NA	(m)
I_f	Net groundwater infiltration rate	NA	(cm/yr)
U_{gw}	Groundwater Darcy velocity	NA	(cm/d)
V_{gw}	Groundwater seepage velocity	NA	(cm/d)
K_s	Saturated hydraulic conductivity	NA	(cm/d)
i	Groundwater gradient	NA	(-)
S_w	Width of groundwater source zone	NA	(m)
S_d	Depth of groundwater source zone	NA	(m)
θ_{eff}	Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	Groundwater pH	NA	(-)
	Biodegradation considered?	NA	

Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		<u>Groundwater Ingestion</u>		<u>Groundwater to Indoor Air</u>		
α_x	Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport		<u>Soil to Outdoor Air Inhal.</u>		<u>GW to Outdoor Air Inhal.</u>		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(m ³ /s)
W_{pl}	Width of GW plume at SW discharge	NA	(m)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(m)
DF _{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)		Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))		
<i>Change - One or more parameter differs from User Chemical Database</i>														
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	TX11	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Phenanthrene	85-01-8	O	178.2334	TX11	0.994	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Trichloroethane, 1,1,1-	71-85-6	O	133.40482	TX11	1330	TX11	1.71E+03	1.24E+02	TX11	7.15E-01	TX11	2.04E+00	Koc	TX11
Methylene bromide	74-95-3	O	173.83	TX11	11000	TX11	2.06E+04	4.59E+01	TX11	3.49E-02	TX11	2.26E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																		
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics														
				Surface Soil Column				Water Bearing Unit				log(Kow) (@ 20 - 25 C) (log(L/kg))	Diffusion Coefficients					
				Slope	y-Intercept	logKd_pH (L/kg)	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)	logKd_pH (L/kg)		Air (cm ² /s)	Water (cm ² /s)				
<i>Change - One or more parameter differs from User Chemical Database</i>																		
Lead (inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	-	-	-	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	-	-	-	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Phenanthrene	85-01-8	O	178.2334	-	-	-	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Trichloroethane, 1,1,1-	71-85-6	O	133.40482	-	-	-	-	-	-	-	-	-	2.68E+00	TX11	7.69E-02	TX11	8.80E-06	TX11
Methylene bromide	74-95-3	O	173.83	-	-	-	-	-	-	-	-	-	1.52E+00	TX11	8.00E-02	TX11	8.00E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters													
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor			
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)							
Leaf (Inorganic)	-	-	-	-	-	-	-	-	-	-	-	-	
Benzo-a-pyrene	1.00E-02	S2 6.60E-01	S2 1.06E+03	1.06E+03	H	-	-	1.00E+00	TX11 2.06E+00	1.53E+03	26000	LY	
Benzo-g,h,i-perylene	1.00E-02	S2 6.60E-01	S2 1.30E+03	1.30E+03	H	-	-	1.00E+00	TX11 8.06E-01	4.33E+03	72000	LY	
Phenanthrene	1.00E-02	S2 6.60E-01	S2 4.00E+02	4.00E+02	H	-	-	1.00E+00	TX11 6.38E+00	6.78E+01	2630	LY	
Trichloroethane, 1,1,1-	5.00E-03	S 5.00E-03	S 5.46E+02	5.46E+02	H	-	-	1.00E+00	TX11 2.22E+00	4.31E+00	9	LY	
Methylene bromide	-	-	-	5.60E+01	5.60E+01	H	-	-	1.00E+00	TX11 8.14E-01	1.27E+00	8.4	LY

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Leaf (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Trichloroethane, 1,1,1-	0.017	0.57	1.4	0.031	0.070011969	D
Methylene bromide	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Derma l Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Derma l (unitless)	Gastrointestinal (unitless)	
		0.066666667	0.15	
Lead (Inorganic)	0.066666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Trichloroethane, 1,1,1-	0	0	0.9	TX11
Methylene bromide	0	0	0.8	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values					
			Residential/Pl ant	Residential/W o Plant	Allotments	Commercial/In d.		
			mg/kg	mg/kg	mg/kg	mg/kg		
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	0.2	MC	1900	OS	-	-	-	-
Methylene bromide	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0189	T3
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-
Trichloroethane, 1,1,1-	-	-	-	-	0.2	T3	12.586	T3	8.391	T3
Methylene bromide	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)	
	Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072
Benzo-a-pyrene	-	-	-	-	-	-	7.3	EPA-I	7.3	D2	0.00088	TX11
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	2	EPA-I	2	D2	5	EPA-I	-	-	-	-	-	-
Methylene bromide	0.06	TX11	0.06	D2	0.004	TX11	0.0075	TX11	0.0075	D2	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	30	30	30	NA	250	180	-
EFD	30	30	30	NA	250	180	-
IRw	1	1	2	2,5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0,5	0,5	0,05	0,3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0,025	0,025	0,025	0,053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg	0,01	0,01	0,01	NA	NA	NA	NA
VGabg	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Residential	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_s Depth to top of affected soils	0,3	(m)
L_{base} Depth to base of affected soils	1,3	(m)
L_{sub} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
Q_{air} Air mixing zone height	2	(m)
Q/C	NA	(g/cm ² /s)
P_a Areal particulate emission rate	NA	(g/cm ² /s)
V	NA	(-)
U_m Mean annual airvelocity at 7m	NA	(-)
U_t Equivalent 7m air velocity threshold value	NA	(-)
F(x)	NA	(-)
PEF	NA	(-)

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

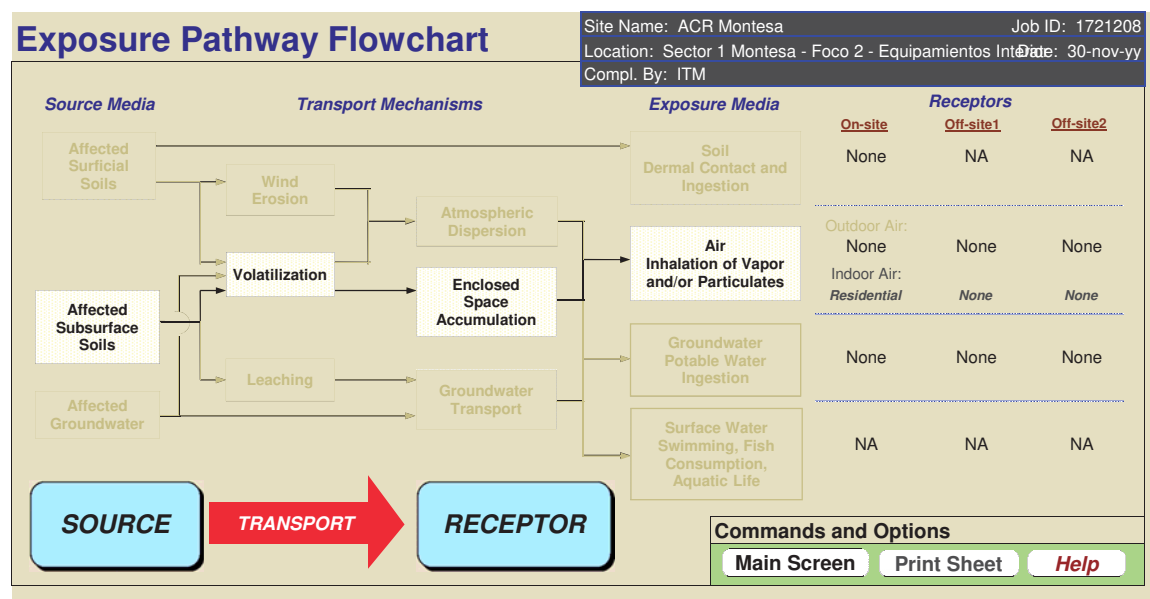
Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_i Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	(-)

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Constituent	Physical Property Data									
	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)	Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C) log(L/kg)		
Polychlorinated biphenyls (liquid)	1336-36-3	G	290	TX11 0.0555	TX11 2.94E+02	TX11 7.60E-05	TX11 1.75E-02	TX11 5.72E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interiores
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air		Water		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)		cm ² /s	TX11	cm ² /s	TX11	
Polychlorinated biphenyls (liquid)	-	-	-	-	-	-	6.30E+00	TX11	1.04E-01	TX11	1.00E-05	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration		
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)				Factor	LY	
Polychlorinated biphenyls (liquid)	5.00E-02	S	-	-	-	-	1.00E+00	TX11	1.67E+00	2.19E+03	36000	LY

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					Water/Skin Derm Ads. Fact Calculated
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Polychlorinated biphenyls (liquid)						

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
Polychlorinated biphenyls (liquid)	0.172839506	0.14	0.81	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards						
Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values			
			Residential/Plant	Residential/Allotments	Commercial/Industrial	
Polychlorinated biphenyls (liquid)	0.0005	MC	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Polychlorinated biphenyls (liquid)	0.000014	T1	0.00003	T1	0.0000013	T3	0.0000013	T3	0.00000385	T3

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/(mg/kg/day))		Dermal Equivalent Slope Factor (1/(mg/kg/day))		Inhalation Equivalent Unit Risk Factor (1/(µg/m ³))	
	EPA-1	D2	EPA-1	D2	EPA-1	D2	EPA-1	D2	EPA-1	D2	EPA-1	D2
Polychlorinated biphenyls (liquid)	0.00002		0.00002				2		2		0.00057	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	125	125	125	NA	6	180	-
EFD Exposure frequency for dermal exposure	125	125	125	NA	6	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.733	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.317	NA	NA	NA
VGBg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGBg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	None	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	Residential	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	NA	NA	NA	(m)
Indoor air inhalation receptor	0	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	NA
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
	<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w Volumetric water content	0,369	(-)
θ_a Volumetric air content	0,041	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
k_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH Soil/groundwater pH	6,8	(-)
W Length of source-zone area parallel to wind	NA	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	NA	(m)
A Source zone area	NA	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1	(m)
L_{sub} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	NA	(m/s)
h_{air} Air mixing zone height	NA	(m)
Q/C Inverse mean concentration at the center of source	NA	
P_a Areal particulate emission rate	NA	(g/cm ² /s)
V Fraction of vegetative cover	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x) Windspeed function dependent on Um/Ut	NA	
PEF Particulate Emission Factor	NA	

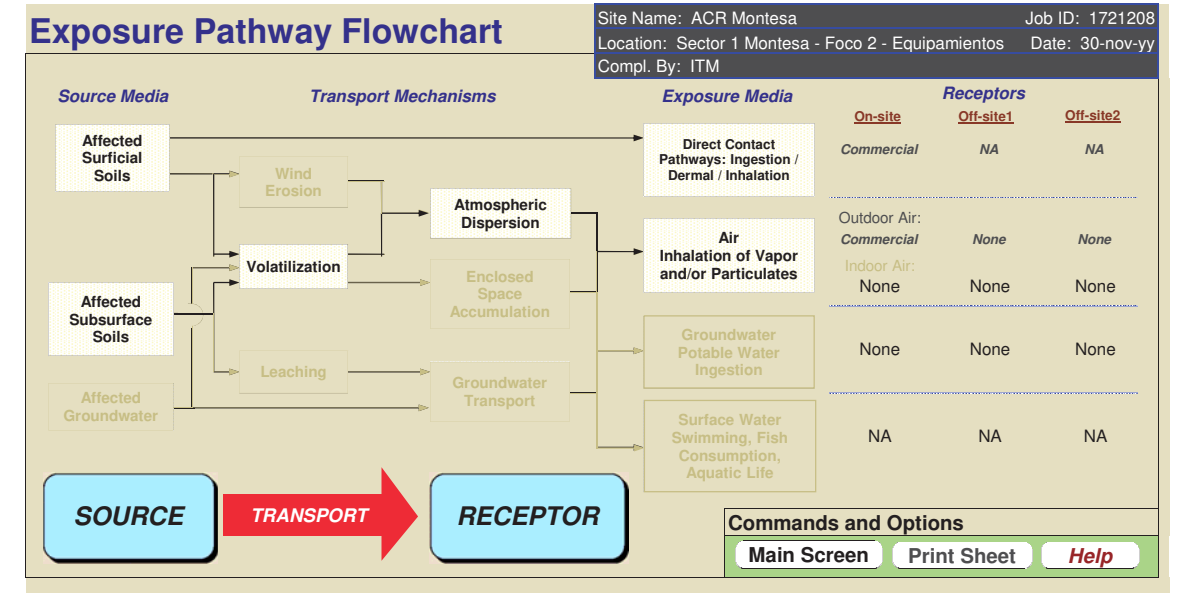
Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	2	NA	(m)
A_b Foundation area	70	NA	(m ²)
X_{crk} Foundation perimeter	49	NA	(m)
ER Building air exchange rate	0,00014	NA	(1/s)
L_{crk} Foundation thickness	0,15	NA	(m)
Z_{crk} Depth to bottom of foundation slab	0,15	NA	(m)
η Foundation crack fraction	0,001	NA	(-)
dP Indoor/outdoor differential pressure	0	NA	(g/cm/s ²)
Q_s Convective air flow through slab	0	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	0,12	NA	(-)
θ_{acrack} Volumetric air content of cracks	0,26	NA	(-)
BV Building Volume	NA	NA	(m ³)
W Building Width Perpendicular to GW flow	NA	NA	(m)
L Building Length Parallel to GW flow	NA	NA	(m)
V Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters	Value	(Units)
δ_{gw} Groundwater mixing zone depth	NA	(m)
I_f Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i Groundwater gradient	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat} Groundwater pH	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{pl} Width of GW plume at SW discharge	NA	(m)
δ_{pl} Thickness of GW plume at SW discharge	NA	(m)
DF _{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs														
Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)		Aqueous Solubility (@ 20 - 25 C) (mg/L)	Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))			
Polychlorinated biphenyls (liquid)	1336-36-3	O	290	TX11	0.0555	TX11	2.94E+02	7.60E-05	TX11	1.75E-02	TX11	5.72E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs																	
Physical Property Data																	
Constituent	pH specific Kd for non-organics										log(Kow) (@ 20 - 25 C) (log(L/kg))	Diffusion Coefficients					
	Surface Soil Column					Water Bearing Unit						Air (cm ² /s)	Water (cm ² /s)				
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)	Slope		y-intercept	logKd_pH (L/kg)				
Polychlorinated biphenyls (liquid)	-	-	-	-	-	-	-	-	-	-	-	6.30E+00	TX11	1.04E-01	TX11	1.00E-05	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Miscellaneous Parameters												
	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor	LY		
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)							
Polychlorinated biphenyls (liquid)	5.00E+02	S	-	-	-	-	1.00E+00	TX11	1.57E+00	2.15E+03	36000		

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Exposure					
	Dermal Permeability Coeff. (cm ² /hr)	Lag time for Dermal Exposure (hr)	Water Dermal Permeability Data			Water/Skin Derm Ads. Fact Calculated
			Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff		
Polychlorinated biphenyls (liquid)	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
Polychlorinated biphenyls (liquid)	0.172839506	0.14	0.81	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Regulatory Standards		Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values			
	Maximum Contaminant Level (mg/L)	MC		Residential/Industrial	Residential/Allotments	Commercial/Industrial	
				mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated biphenyls (liquid)	0.0005	MC	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)			Saltwater Fish (mg/L)
Polychlorinated biphenyls (liquid)	0.00014	T1	0.00003	T1	0.000013	T3	0.000013	T3	0.00000585	T3

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Toxicity Parameters											
	Oral RID or TDSI (mg/kg-day)	Dermal RID or TDSI (mg/kg-day)	Inhalation Equivalent RIC or TCA (mg/m ³)	Oral Equivalent Slope Factor 1 (mg/kg-day)	Dermal Equivalent Slope Factor 1 (mg/kg-day)	Inhalation Equivalent Unit Risk Factor 1 (µg/m ³)	Oral Equivalent Slope Factor 2	Dermal Equivalent Slope Factor 2	Inhalation Equivalent Unit Risk Factor 2			
Polychlorinated biphenyls (liquid)	0.00002	EPA-I	0.00002	D2	-	-	2	EPA-I	2	D2	0.00057	EPA-I

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	350	350	350	NA	6	180	-
EFD	350	350	350	NA	6	180	-
IRw	1	1	2	2.5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0.5	0.5	0.05	0.3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0.025	0.025	0.025	0.053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0.002	0.002	0.006	2.053	NA	NA	NA
IRabg	0.001	0.001	0.002	0.887	NA	NA	NA
VGbg	0.01	0.01	0.01	NA	NA	NA	NA
VGabg	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Commercial	NA	NA
Apply CLEA- UK SGV levels	No	No	No
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h _{cap} Capillary zone thickness	NA	(m)
h _v Vadose zone thickness	NA	(m)
ρ _s Soil bulk density	1,7	(g/cm ³)
f _{oc} Fraction organic carbon	0,01	(-)
θ _t Soil total porosity	0,41	(-)
θ _v Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ _a Volumetric air content	0,041 0,33 0,26	(-)
K _{vs} Vertical hydraulic conductivity	864	(cm/d)
K _v Vapor permeability	1E-12	(m ²)
L _{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W _{gw} Length of source-zone area parallel to GW flow	NA	(m)
L _{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L _{top} Depth to top of affected soils	0	(m)
L _{base} Depth to base of affected soils	1	(m)
L _{sub} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U _{air} Ambient air velocity in mixing zone	2,25	(m/s)
Q _{air} Air mixing zone height	2	(m)
Q/C	NA	(g/cm ² /s)
P _a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	NA	(-)
U _m Mean annual airvelocity at 7m	NA	(-)
U _t Equivalent 7m air velocity threshold value	NA	(-)
F(x)	NA	(-)
PEF	6,9E-12	(-)

Building Parameters	Residential	Commercial	(Units)
L _b Building volume/area ratio	NA	NA	(m)
A _b Foundation area	NA	NA	(m ²)
X _{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L _{crk} Foundation thickness	NA	NA	(m)
Z _{crk} Depth to bottom of foundation slab	NA	NA	(m)
η	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q _s Convective air flow through slab	NA	NA	(m ³ /s)
θ _{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ _{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

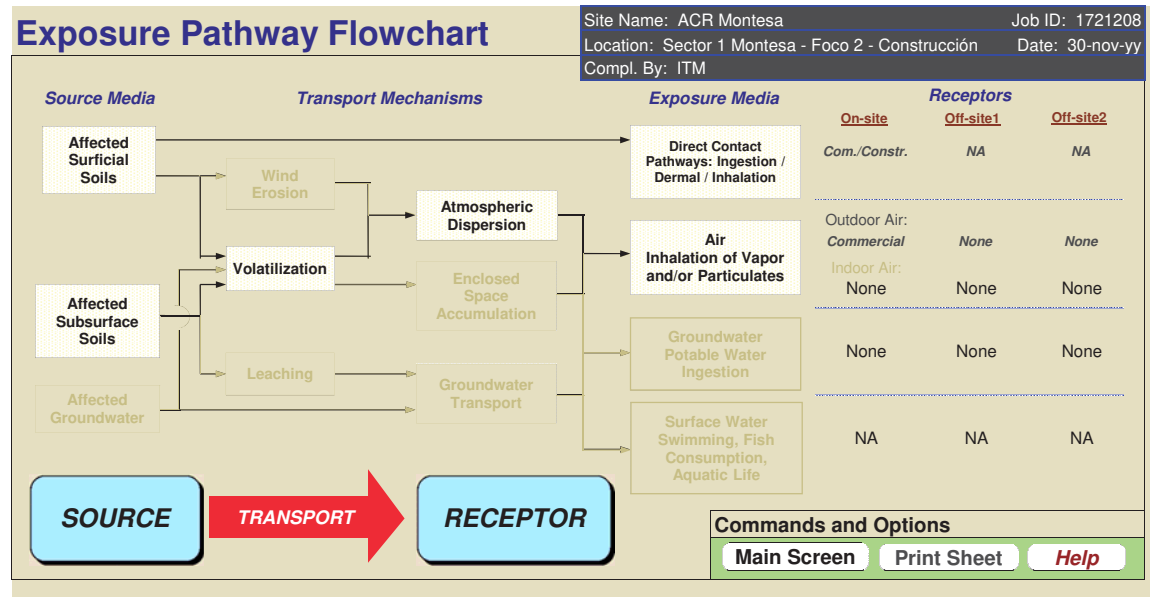
Groundwater Parameters	Value	(Units)
θ _{gw} Groundwater mixing zone depth	NA	(m)
I _i Net groundwater infiltration rate	NA	(cm/yr)
U _{gw} Groundwater Darcy velocity	NA	(cm/d)
V _{gw} Groundwater seepage velocity	NA	(cm/d)
K _s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S _w Width of groundwater source zone	NA	(m)
S _d Depth of groundwater source zone	NA	(m)
θ _{eff} Effective porosity in water-bearing unit	NA	(-)
f _{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat} Groundwater pH	NA	(-)
Biodegradation considered?	NA	(-)

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α _x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α _y Transverse dispersivity	NA	NA	NA	NA	(m)
α _z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ _y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ _z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q _{sw} Surface water flowrate	NA	(m ³ /s)
W _{sw} Width of GW plume at SW discharge	NA	(m)
δ _{sw} Thickness of GW plume at SW discharge	NA	(m)
DF _{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C)					
				(mg/L)	(TX11)				(Koc)	(TX11)				
Polychlorinated biphenyls (liquid)	1336-36-3	G	290	TX11	0.0555	TX11	2.94E-02	7.60E-05	TX11	1.75E-02	TX11	5.72E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air		Water		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)		cm ² /s	TX11	cm ² /s	TX11	
Polychlorinated biphenyls (liquid)	-	-	-	-	-	-	6.30E+00	TX11	1.04E-01	TX11	1.00E-05	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration		
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)				Factor	LY	
Polychlorinated biphenyls (liquid)	5.00E-02	S	-	-	-	-	1.00E+00	TX11	1.67E+00	2.19E+03	36000	LY

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					Water/Skin Derm Ads. Fact Calculated
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Polychlorinated biphenyls (liquid)						

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
Polychlorinated biphenyls (liquid)	0.172839506	0.14	0.81	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards						
Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values			
			Residential/Plant	Residential/Allotments	Commercial/Industrial	
Polychlorinated biphenyls (liquid)	0.0005	MC	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Polychlorinated biphenyls (liquid)	0.000014	T1	0.00003	T1	0.0000013	T3	0.0000013	T3	0.00000385	T3

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/(mg/kg/day))		Dermal Equivalent Slope Factor (1/(mg/kg/day))		Inhalation Equivalent Unit Risk Factor (1/(µg/m ³))	
	EPA-1	D2	EPA-1	D2	EPA-1	D2	EPA-1	D2	EPA-1	D2	EPA-1	D2
Polychlorinated biphenyls (liquid)	0.00002		0.00002				2		2		0.00057	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	30	30	30	NA	250	30	-
EFD Exposure frequency for dermal exposure	30	30	30	NA	250	30	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.176	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.076	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Construcción Completed By: ITM Date Completed: 30-nov-yy

Surface Soil Column Parameters		Value	(Units)
h_{cap}	Capillary zone thickness	NA	(m)
h_v	Vadose zone thickness	NA	(m)
ρ_s	Soil bulk density	1,7	(g/cm ³)
f_{oc}	Fraction organic carbon	0,01	(-)
θ_T	Soil total porosity	0,41	(-)
		<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w	Volumetric water content	0,369	(-)
θ_a	Volumetric air content	0,041	(-)
K_{vs}	Vertical hydraulic conductivity	864	(cm/d)
k_v	Vapor permeability	1E-12	(m ²)
L_{gw}	Depth to groundwater	NA	(m)
pH	Soil/groundwater pH	6,8	(-)
W	Length of source-zone area parallel to wind	45	(m)
W_{gw}	Length of source-zone area parallel to GW flow	NA	(m)
L_{ss}	Thickness of affected surface soils	1	(m)
A	Source zone area	2025	(m ²)
L_s	Depth to top of affected soils	0	(m)
L_{base}	Depth to base of affected soils	1,3	(m)
L_{subs}	Thickness of affected soils	1,3	(m)

Outdoor Air Parameters		Value	(Units)
U_{air}	Ambient air velocity in mixing zone	2,25	(m/s)
h_{air}	Air mixing zone height	2	(m)
Q/C	Inverse mean concentration at the center of source	NA	
P_a	Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_l	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependent on Um/Ut	NA	
PEF	Particulate Emission Factor	6,9E-12	

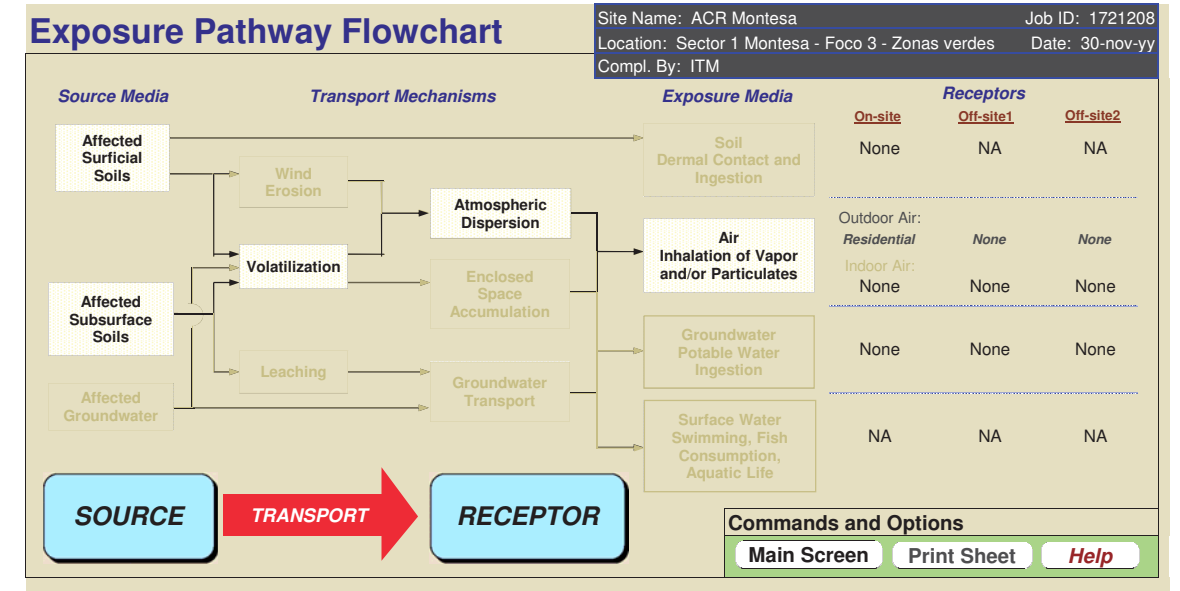
Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	NA	(m)
A_b	Foundation area	NA	NA	(m ²)
X_{crk}	Foundation perimeter	NA	NA	(m)
ER	Building air exchange rate	NA	NA	(1/s)
L_{crk}	Foundation thickness	NA	NA	(m)
Z_{crk}	Depth to bottom of foundation slab	NA	NA	(m)
η	Foundation crack fraction	NA	NA	(-)
dP	Indoor/outdoor differential pressure	NA	NA	(g/cm/s ²)
Q_s	Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	NA	NA	(-)
θ_{acrack}	Volumetric air content of cracks	NA	NA	(-)
BV	Building Volume	NA	NA	(m ³)
W	Building Width Perpendicular to GW flow	NA	NA	(m)
L	Building Length Parallel to GW flow	NA	NA	(m)
V	Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	NA	(m)
I_f	Net groundwater infiltration rate	NA	(cm/yr)
U_{gw}	Groundwater Darcy velocity	NA	(cm/d)
V_{gw}	Groundwater seepage velocity	NA	(cm/d)
K_s	Saturated hydraulic conductivity	NA	(cm/d)
i	Groundwater gradient	NA	(-)
S_w	Width of groundwater source zone	NA	(m)
S_d	Depth of groundwater source zone	NA	(m)
θ_{eff}	Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	Groundwater pH	NA	(-)
	Biodegradation considered?	NA	

Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		<u>Groundwater Ingestion</u>		<u>Groundwater to Indoor Air</u>		
α_x	Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport		<u>Soil to Outdoor Air Inhal.</u>		<u>GW to Outdoor Air Inhal.</u>		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(m ³ /s)
W_{pl}	Width of GW plume at SW discharge	NA	(m)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(m)
DF _{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data													
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C)		Henry's Constant (@ 20 - 25 C)		log (Koc) or log (Kd) (@ 20 - 25 C)		
				(mg/L)	(mg/L)		(mm Hg)	(unitless)	(unitless)	(log(L/kg))			
TPH - Aliph >C21-C34	T-ar2134	OT	400	0.000025	-	1.58E+01	3.34E-07	-	7.26E+03	-	8.80E+00	Koc	
TPH - Arom >C21-C35	T-ar2134	OT	240	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc TPH	
Di-n-butyl phthalate	84-74-2	O	278.34828	TX11	11.2	TX11	3.80E+03	4.25E-05	TX11	5.94E-05	TX11	4.53E+00	Koc TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C)		Henry's Constant (@ 20 - 25 C)		log (Koc) or log (Kd) (@ 20 - 25 C)					
				(mg/L)	(mg/L)		(mm Hg)	(unitless)	(unitless)	(log(L/kg))						
				pH specific Kd for non-organics												
Surface Soil Column		Water Bearing Unit		log(Kow) (@ 20 - 25 C)		Diffusion Coefficients										
Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)	log(L/kg)	Air (cm ² /s)	Water (cm ² /s)								
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-	-	-				
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-	-	-				
Di-n-butyl phthalate	-	-	-	-	-	-	-	-	-	-	4.61E+00	TX11	4.38E-02	TX11	7.86E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Miscellaneous Parameters												
	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor	
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)							
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	890000	LY
TPH - Arom >C21-C35	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	10000	LY
Di-n-butyl phthalate	1.00E-02	S2	6.60E-01	S2	2.30E+01	2.30E+01	H	1.00E+00	TX11	6.32E+00	1.08E+02	1900	LY

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Exposure					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Water Dermal Permeability Data			Water/Skin Derm Ads. Fact Calculated
			Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff		
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Di-n-butyl phthalate	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Di-n-butyl phthalate	0.1	0.1	1	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Regulatory Standards							
	Maximum Contaminant Level		Time-Weighted Average Workplace Criteria	UK Soil Guideline Values				
	(mg/L)		(mg/m ³)	Residential/Pl ant	Residential/In d. Plant	Allotments	Commercial/In d.	
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	-	-	5	OS	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards									
Constituent	Surface Water Quality Criteria						Human Health Protection		
	Aquatic Life Protection		Marine (mg/L)	Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)	Saltwater Fish (mg/L)		
	Freshwater (mg/L)								
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	-	-	-	-	2.7	E	12	E	12

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Toxicity Parameters								
	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1/(mg/kg-day)	Dermal Equivalent Slope Factor 1/(mg/kg-day)	Inhalation Equivalent Unit Risk Factor 1/(µg/m ³)
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-
Di-n-butyl phthalate	0.1	EPA-I	0.1	D2	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	30	30	30	NA	250	180	-
EFD	30	30	30	NA	250	180	-
IRw	1	1	2	2,5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0,5	0,5	0,05	0,3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0,025	0,025	0,025	0,053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg	0,01	0,01	0,01	NA	NA	NA	NA
VGabg	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Residential	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
 Completed By: ITM
 Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_s Depth to top of affected soils	0,3	(m)
L_{base} Depth to base of affected soils	1,3	(m)
L_{sub} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
h_{mix} Air mixing zone height	2	(m)
Q/C	NA	(g/cm ² /s)
P_a Areal particulate emission rate	NA	(g/cm ² /s)
V	NA	(-)
U_m Mean annual airvelocity at 7m	NA	(-)
U_t Equivalent 7m air velocity threshold value	NA	(-)
F(x)	NA	(-)
PEF	NA	(-)

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

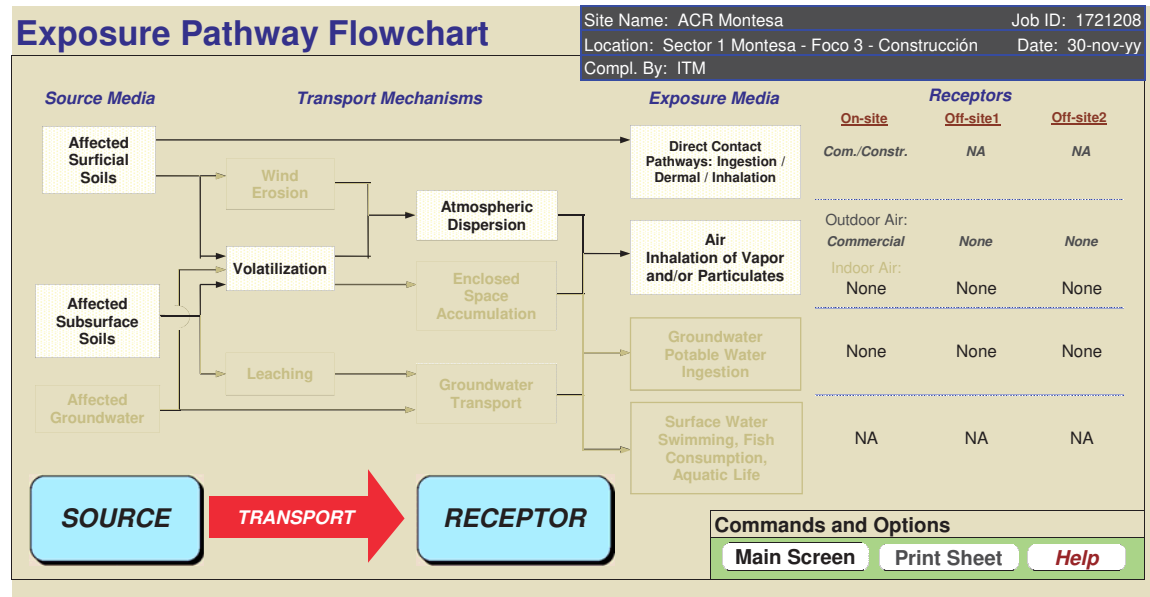
Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_f Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	(-)

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C)					
				(mg/L)	(TPH)				(log(L/kg))	(log(L/kg))				
TPH - Aliph >C21-C34	T-ar2134	OT	400	0.0000025	-	1.98E+01	3.34E-07	-	7.26E+03	8.80E+00	Koc	-		
TPH - Arom >C21-C35	T-ar2134	OT	240	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH	
Di-n-butyl phthalate	84-74-2	O	278.34828	TX11	11.2	TX11	3.80E+03	4.25E-05	TX11	5.94E-05	TX11	4.53E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data											
Constituent	pH specific Kd for non-organics						log(Kow) (@ 26 - 25 C) (log(L/kg))	Diffusion Coefficients			
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)	Water (cm ² /s)	TPH	TPH
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)					
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
Di-n-butyl phthalate	-	-	-	-	-	-	4.61E+00	TX11	4.38E-02	TX11	7.86E-06

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters															
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration					
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)				Factor	LY				
TPH - Aliph >C21-C34	-	-	-	-	-	-	1.00E+00	TX11	-	-	890000	LY			
TPH - Arom >C21-C35	-	-	-	-	-	-	1.00E+00	TX11	-	-	10000	LY			
Di-n-butyl phthalate	1.00E-02	S2	6.60E-01	S2	2.30E+01	2.30E+01	H	-	-	1.00E+00	TX11	6.32E+00	1.08E+02	1900	LY

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					Water/Skin Derm Ads. Fact Calculated
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Di-n-butyl phthalate	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Di-n-butyl phthalate	0.1	0.1	1	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Regulatory Standards								
	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values						
			Residential/Plant	Residential/Allotments	Commercial/Industrial				
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	-	5	OS	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Regulatory Standards									
	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	-	-	-	-	2.7	E	12	E	12	E

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters										
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1/(mg/kg/day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m ³)	
TPH - Aiph >C21-C34	1.5	TK11	1.5	D2	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-
Di-n-butyl phthalate	0.1	EPA1	0.1	D2	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	30	30	30	NA	250	30	-
EFD Exposure frequency for dermal exposure	30	30	30	NA	250	30	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.176	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.076	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa

Site Location: Sector 1 Montesa - Foco 3 - Construcción

Completed By: ITM

Date Completed: 30-nov-yy

Surface Soil Column Parameters		Value	(Units)
h_{cap}	Capillary zone thickness	NA	(m)
h_v	Vadose zone thickness	NA	(m)
ρ_s	Soil bulk density	1,7	(g/cm ³)
f_{oc}	Fraction organic carbon	0,01	(-)
θ_T	Soil total porosity	0,41	(-)
		<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w	Volumetric water content	0,369	(-)
θ_a	Volumetric air content	0,041	(-)
K_{vs}	Vertical hydraulic conductivity	864	(cm/d)
k_v	Vapor permeability	1E-12	(m ²)
L_{gw}	Depth to groundwater	NA	(m)
pH	Soil/groundwater pH	6,8	(-)
W	Length of source-zone area parallel to wind	45	(m)
W_{gw}	Length of source-zone area parallel to GW flow	NA	(m)
L_{ss}	Thickness of affected surface soils	1	(m)
A	Source zone area	2025	(m ²)
L_s	Depth to top of affected soils	0	(m)
L_{base}	Depth to base of affected soils	1,3	(m)
L_{sube}	Thickness of affected soils	1,3	(m)

Outdoor Air Parameters		Value	(Units)
U_{air}	Ambient air velocity in mixing zone	2,25	(m/s)
σ_{air}	Air mixing zone height	2	(m)
Q/C	Inverse mean concentration at the center of source	NA	
P_a	Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_l	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependent on U_m/U_t	NA	
PEF	Particulate Emission Factor	6,9E-12	

Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	NA	(m)
A_b	Foundation area	NA	NA	(m ²)
X_{crk}	Foundation perimeter	NA	NA	(m)
ER	Building air exchange rate	NA	NA	(1/s)
L_{crk}	Foundation thickness	NA	NA	(m)
Z_{crk}	Depth to bottom of foundation slab	NA	NA	(m)
η	Foundation crack fraction	NA	NA	(-)
dP	Indoor/outdoor differential pressure	NA	NA	(g/cm ² /s ²)
Q_s	Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	NA	NA	(-)
θ_{acrack}	Volumetric air content of cracks	NA	NA	(-)
BV	Building Volume	NA	NA	(m ³)
w	Building Width Perpendicular to GW flow	NA	NA	(m)
L	Building Length Parallel to GW flow	NA	NA	(m)
v	Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	NA	(m)
I_f	Net groundwater infiltration rate	NA	(cm/yr)
U_{gw}	Groundwater Darcy velocity	NA	(cm/d)
V_{gw}	Groundwater seepage velocity	NA	(cm/d)
K_s	Saturated hydraulic conductivity	NA	(cm/d)
i	Groundwater gradient	NA	(-)
S_w	Width of groundwater source zone	NA	(m)
S_d	Depth of groundwater source zone	NA	(m)
θ_{eff}	Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	Groundwater pH	NA	(-)
	Biodegradation considered?	NA	

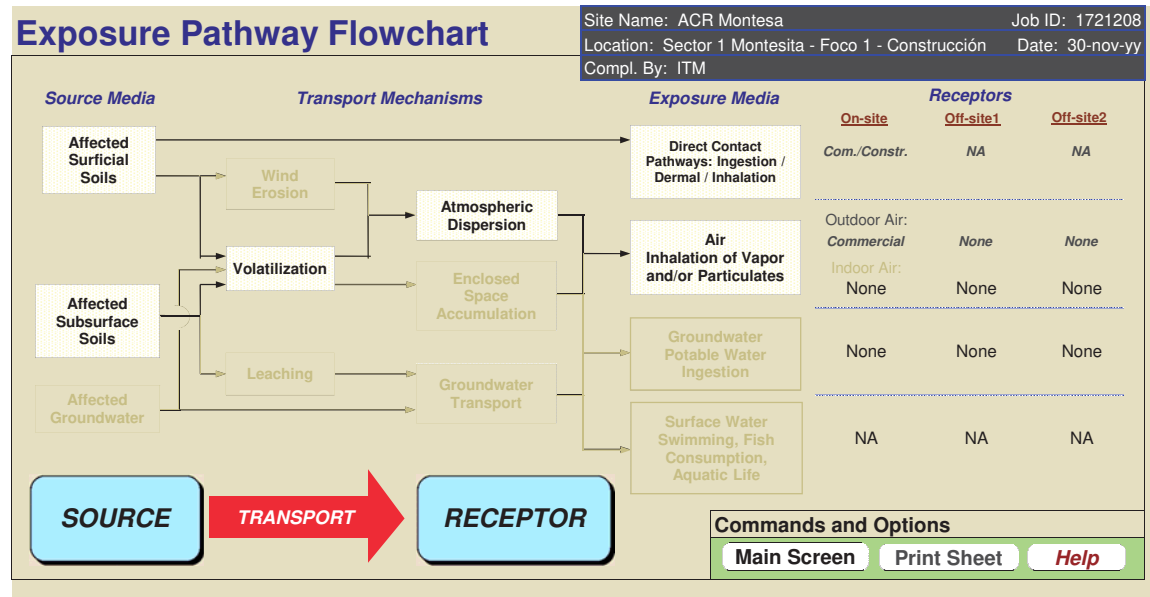
Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		<u>Groundwater Ingestion</u>		<u>Groundwater to Indoor Air</u>		
α_x	Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport		<u>Soil to Outdoor Air Inhal.</u>		<u>GW to Outdoor Air Inhal.</u>		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(m ³ /s)
W_{pl}	Width of GW plume at SW discharge	NA	(m)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(m)
DF_{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

SECTOR 1 - MONTESITA



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C)				
				(mg/L)	(mg/L)				log(L/kg)	log(L/kg)			
TPH - Aliph >C21-C34	T-ar2134	OT	400	-	0.0000025	1.98E+01	3.34E-07	-	7.26E+03	8.80E+00	Koc	-	
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Di-n-butyl phthalate	B4-74-2	O	278.34828	TX11	11.2	3.80E+03	4.25E-05	TX11	5.94E-05	TX11	4.53E+00	Koc	TX11
TPH - Aliph >C10-C12	T-al1012	OT	160	TPH	0.034	8.62E+01	4.79E-01	TPH	1.22E+02	TPH	5.40E+00	Koc	TPH
TPH - Aliph >C12-C16	T-al1216	OT	200	TPH	0.00076	3.82E+01	3.85E-02	TPH	5.21E+02	TPH	6.70E+00	Koc	TPH
TPH - Aliph >C16-C21	T-al1621	OT	270	TPH	0.0000025	1.58E+01	8.36E-04	TPH	4.90E+03	TPH	8.80E+00	Koc	TPH
TPH - Arom >C16-C21	T-ar1621	OT	190	TPH	0.65	1.03E+02	8.36E-04	TPH	1.33E-02	TPH	4.20E+00	Koc	TPH
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 26 - 25 C) (log(L/kg))	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)	Water (cm ² /s)			
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-	
TPH - Arom >C21-C35	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH	
Di-n-butyl phthalate	-	-	-	-	-	-	4.61E+00	TX11	4.38E-02	TX11	7.86E-06	TX11
TPH - Aliph >C10-C12	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH	
TPH - Aliph >C12-C16	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH	
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH	
TPH - Arom >C16-C21	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH	
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration		
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)				Factor	Factor	
TPH - Aliph >C21-C34	-	-	-	-	-	-	1.00E+00	TX11	-	-	89000	LY
TPH - Arom >C21-C35	-	-	-	-	-	-	1.00E+00	TX11	-	-	10000	LY
Di-n-butyl phthalate	1.00E-02	S2	6.60E-01	S2	2.30E+01	2.30E+01	1.00E+00	TX11	6.32E+00	1.08E+02	1900	LY
TPH - Aliph >C10-C12	-	-	-	-	-	-	1.00E+00	TX11	-	-	4200	LY
TPH - Aliph >C12-C16	-	-	-	-	-	-	1.00E+00	TX11	-	-	36000	LY
TPH - Aliph >C16-C21	-	-	-	-	-	-	1.00E+00	TX11	-	-	890000	LY
TPH - Arom >C16-C21	-	-	-	-	-	-	1.00E+00	TX11	-	-	790	LY
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2	6.60E-01	S2	3.89E+02	3.89E+02	1.00E+00	TX11	1.10E-02	8.74E+04	850	LY

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Di-n-butyl phthalate	-	-	-	-	-	-
TPH - Aliph >C10-C12	-	-	-	-	-	-
TPH - Aliph >C12-C16	-	-	-	-	-	-
TPH - Aliph >C16-C21	-	-	-	-	-	-
TPH - Arom >C16-C21	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Di-n-butyl phthalate	0.1	0.1	1	TX11
TPH - Aliph >C10-C12	0.2	0.1	0.5	TX11
TPH - Aliph >C12-C16	0.2	0.1	0.5	TX11
TPH - Aliph >C16-C21	0.2	0.1	0.5	TX11
TPH - Arom >C16-C21	0.146067416	0.13	0.89	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values							
			Residential/Plant	Residential/Plant	Allotments	Commercial/Industrial				
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	-	5	OS	-	-	-	-	-	-	-
TPH - Aliph >C10-C12	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C12-C16	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C16-C21	-	-	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)	Freshwater Fish (mg/L)		Saltwater Fish (mg/L)		
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	-	-	-	-	2.7	E	12	E	12	E
TPH - Aliph >C10-C12	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C12-C16	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C16-C21	-	-	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1/(mg/kg/day)		Dermal Equivalent Slope Factor 1/(mg/kg/day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m ³)	
	Value	TX11	Value	D2	Value	TX11	Value	EPA1	Value	D2	Value	D2
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	0.1	EPA1	0.1	D2	-	-	-	-	-	-	-	-
TPH - Aliph >C10-C12	0.1	TX11	0.1	D2	0.5	TX11	-	-	-	-	-	-
TPH - Aliph >C12-C16	0.1	TX11	0.1	D2	0.5	TX11	-	-	-	-	-	-
TPH - Aliph >C18-C21	2	TX11	2	D2	-	-	-	-	-	-	-	-
TPH - Arom >C16-C21	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-
Bis (2-ethylhexyl) phthalate	0.02	EPA1	0.02	D2	-	-	0.014	EPA1	0.014	D2	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	30	30	30	NA	250	30	-
EFD Exposure frequency for dermal exposure	30	30	30	NA	250	30	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.176	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.076	NA	NA	NA
VGBg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGBg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesita - Foco 1 - Construcción Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
	<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w Volumetric water content	0,369	(-)
θ_a Volumetric air content	0,041	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
k_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH Soil/groundwater pH	6,8	(-)
W Length of source-zone area parallel to wind	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A Source zone area	2025	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1,3	(m)
L_{subs} Thickness of affected soils	1,3	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
h_{air} Air mixing zone height	2	(m)
Q/C Inverse mean concentration at the center of source	NA	
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V Fraction of vegetative cover	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x) Windspeed function dependent on Um/Ut	NA	
PEF Particulate Emission Factor	6,9E-12	

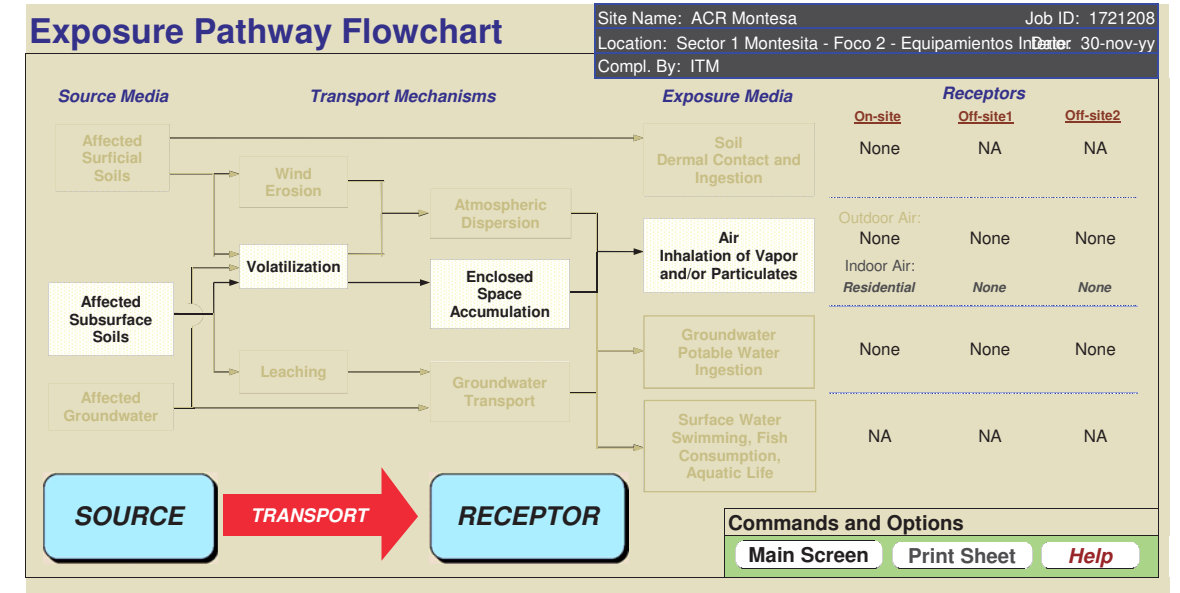
Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER Building air exchange rate	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP Indoor/outdoor differential pressure	NA	NA	(g/cm ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV Building Volume	NA	NA	(m ³)
W Building Width Perpendicular to GW flow	NA	NA	(m)
L Building Length Parallel to GW flow	NA	NA	(m)
V Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters	Value	(Units)
δ_{gw} Groundwater mixing zone depth	NA	(m)
I_r Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i Groundwater gradient	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat} Groundwater pH	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{pl} Width of GW plume at SW discharge	NA	(m)
δ_{pl} Thickness of GW plume at SW discharge	NA	(m)
DF _{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
 Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data													
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)		Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))	
				(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mm Hg)	(mm Hg)	(unitless)	(unitless)	(log(L/kg))	(log(L/kg))
Antimony	7440-36-0	M	121.75	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.65E+00	Kd	TX11
Copper	7440-50-8	M	63.546	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.60E+00	Kd	TX11
Lead (Inorganic)	7439-92-1	M	207.2	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Molybdenum	7439-98-7	M	95.94	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.30E+00	Kd	TX11
Zinc	7440-66-6	M	65.39	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Interior
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																	
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics													
				Surface Soil Column			Water Bearing Unit			log(Kow) (@ 20 - 25 C) (log(L/kg))	Diffusion Coefficients						
				Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)		log(L/kg)	Air (cm ² /s)	Water (cm ² /s)				
Antimony	7440-36-0	M	121.75	-	-	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Copper	7440-50-8	M	63.546	-	-	-	-	-	-	-	-	-5.71E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Lead (Inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Molybdenum	7439-98-7	M	95.94	-	-	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Zinc	7440-66-6	M	65.39	2.37E-01	1.80E-01	1.79E+00	2.37E-01	1.80E-01	1.79E+00	E2	-4.71E-01	TX11	0.00E+00	TX11	0.00E+00	TX11	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Interior
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors			Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration	
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)	TX11				Factor	Factor
Antimony	3.00E-03	MC	-	-	-	7.00E-02	3.00E-02	TX11	1.00E+00	-	-	-
Copper	6.00E-02	S	6.00E-03	S	-	2.90E-01	2.50E-01	TX11	1.00E+00	-	-	-
Lead (inorganic)	-	-	-	-	-	-	-	-	1.00E+00	-	-	-
Molybdenum	-	-	-	-	-	1.00E-01	6.00E-02	TX08	1.00E+00	-	-	-
Zinc	5.00E-03	S	2.00E-03	S	-	9.00E-02	4.40E-02	TX11	1.00E+00	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Antimony	-	-	-	-	-	-
Copper	0.001	-	-	-	-	D
Lead (inorganic)	-	-	-	-	-	-
Molybdenum	0.001	-	-	-	-	D
Zinc	0.0006	-	-	-	-	D

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Derma Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Derma (unitless)	Gastrointestinal (unitless)	
Antimony	0.06666667	0.01	0.15	TX11
Copper	0.01754386	0.01	0.57	TX11
Lead (inorganic)	0.06666667	0.01	0.15	TX11
Molybdenum	0.026315789	0.01	0.38	TX11
Zinc	0.05	0.01	0.2	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values				
	MC	OS		Residential/Pl ant	Residential/W o Plant	Allotments	Commercial/In d.	
Antimony	0.006	MC	0.5	OS	mg/kg	mg/kg	mg/kg	mg/kg
Copper	1.3	MC	1	OS	-	-	-	-
Lead (inorganic)	0.015	MC	50	OS	-	-	-	-
Molybdenum	-	-	10	OS	-	-	-	-
Zinc	-	-	-	OS	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Antimony	-	-	-	-	0.014	E	4.3	E	4.3	E
Copper	-	-	0.0036	T1	1.3	E	-	-	-	-
Lead (inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0189	T3
Molybdenum	-	-	-	-	-	-	-	-	-	-
Zinc	-	-	0.0842	T1	9.1	E	69	E	69	E

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1 (mg/kg-day)		Dermal Equivalent Slope Factor 1 (mg/kg-day)		Inhalation Equivalent Unit Risk Factor 1 (µg/m ³)	
	Antimony	0.0004	EPA-1	0.0004	D2	-	-	-	-	-	-	-
Copper	0.04	TX11	0.04	D2	-	-	-	-	-	-	-	-
Lead (inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00012	-
Molybdenum	0.005	EPA-1	0.005	D2	-	-	-	-	-	-	-	-
Zinc	0.3	EPA-1	0.3	D2	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Interior Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	125	125	125	NA	6	180	-
EFD	125	125	125	NA	6	180	-
IRw	1	1	2	2.5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0.5	0.5	0.05	0.3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0.025	0.025	0.025	0.053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0.002	0.002	0.006	0.733	NA	NA	NA
IRabg	0.001	0.001	0.002	0.317	NA	NA	NA
VGbg	0.01	0.01	0.01	NA	NA	NA	NA
VGabg	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	None	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	Residential	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	NA	NA	NA	(m)
Indoor air inhalation receptor	0	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	NA
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Interior Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	Length of source-zone area parallel to wind	(m)
W_{gw}	Length of source-zone area parallel to GW flow	(m)
L_{ss}	Thickness of affected surface soils	(m)
A	Source zone area	(m ²)
L_{top}	Depth to top of affected soils	(m)
L_{base}	Depth to base of affected soils	(m)
L_{sub}	Thickness of affected soils	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	NA	(m/s)
Q_{air} Air mixing zone height	NA	(m)
Q/C	Inverse mean concentration at the center of source	NA
P_a	Areal particulate emission rate	(g/cm ² /s)
V	Fraction of vegetative cover	NA
U_m	Mean annual airvelocity at 7m	NA
U_t	Equivalent 7m air velocity threshold value	NA
F(x)	Windspeed function dependant on Um/Ut	NA
PEF	Particulate Emission Factor	NA

Building Parameters	Residential	Commercial	(Units)
L_b	2	NA	(m)
A_b	70	NA	(m ²)
X_{crk}	49	NA	(m)
ER	Building air exchange rate	0,00014	(1/s)
L_{crk}	Foundation thickness	0,15	(m)
Z_{crk}	Depth to bottom of foundation slab	0,15	(m)
η	Foundation crack fraction	0,001	(-)
dP	Indoor/outdoor differential pressure	0	(g/cm ² /s ²)
Q_s	Convective air flow through slab	0	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	0,12	(-)
θ_{acrack}	Volumetric air content of cracks	0,26	(-)
BV	Building Volume	NA	(m ³)
w	Building Width Perpendicular to GW flow	NA	(m)
L	Building Length Parallel to GW flow	NA	(m)
v	Saturated Soil Zone Porosity	NA	(-)

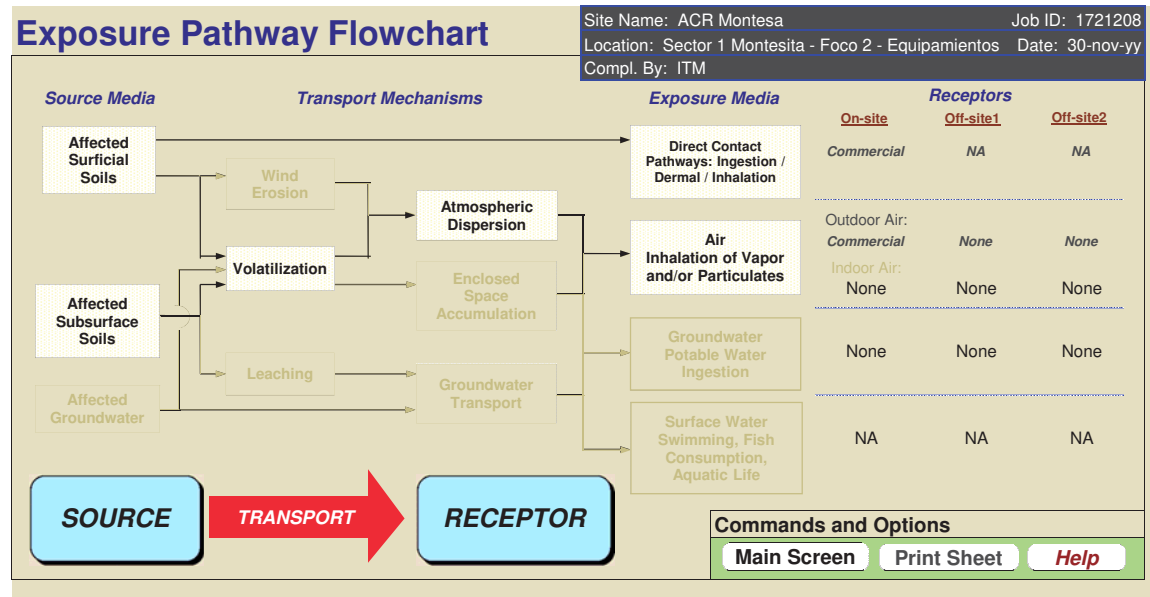
Groundwater Parameters	Value	(Units)
θ_{gw}	Groundwater mixing zone depth	NA
I_i	Net groundwater infiltration rate	NA
U_{gw}	Groundwater Darcy velocity	NA
V_{gw}	Groundwater seepage velocity	NA
K_s	Saturated hydraulic conductivity	NA
i	Groundwater gradient	NA
S_w	Width of groundwater source zone	NA
S_d	Depth of groundwater source zone	NA
θ_{eff}	Effective porosity in water-bearing unit	NA
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA
pH _{sat}	Groundwater pH	NA
	Biodegradation considered?	NA

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x	Longitudinal dispersivity	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y	Transverse dispersion coefficient	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA
W_{sw}	Width of GW plume at SW discharge	NA
δ_{sw}	Thickness of GW plume at SW discharge	NA
DF_{sw}	Groundwater-to-surface water dilution factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))					
				TX11	TX11				TX11	TX11				
Antimony	7440-36-0	M	121.75	0	TX11	1.00E+08	0.00E+00	TX11	0.00E+00	TX11	1.65E+00	Kd	TX11	
Copper	7440-50-8	M	63.546	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.60E+00	Kd	TX11
Lead (Inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Molybdenum	7439-98-7	M	95.94	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.30E+00	Kd	TX11
Zinc	7440-66-6	M	65.39	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	f(pH)	Kd	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)		Water (cm ² /s)		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
Antimony	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Copper	-	-	-	-	-	-	-5.71E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Lead (inorganic)	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Molybdenum	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Zinc	2.37E-01	1.80E-01	1.79E+00	2.37E-01	1.80E-01	1.79E+00	E2	-4.71E-01	TX11	0.00E+00	TX11	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
Antimony	3.00E-03	MC	-	-	-	-	7.00E-02	3.00E-02	TX11	1.00E+00	TX11	-
Copper	6.00E-02	S	6.00E-03	S	-	-	2.90E-01	2.50E-01	TX11	1.00E+00	TX11	-
Lead (inorganic)	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-
Molybdenum	-	-	-	-	-	-	1.00E-01	6.00E-02	TX08	1.00E+00	TX11	-
Zinc	5.00E-03	S	2.00E-03	S	-	-	9.00E-02	4.40E-02	TX11	1.00E+00	TX11	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Change - One or more parameter differs from User Chemical Database						
Antimony	-	-	-	-	-	-
Copper	0.001	-	-	-	-	D
Lead (inorganic)	-	-	-	-	-	-
Molybdenum	0.001	-	-	-	-	D
Zinc	0.0006	-	-	-	-	D

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Change - One or more parameter differs from User Chemical Database				
Antimony	0.066666667	0.01	0.15	TX11
Copper	0.01754386	0.01	0.57	TX11
Lead (inorganic)	0.066666667	0.01	0.15	TX11
Molybdenum	0.026315789	0.01	0.38	TX11
Zinc	0.05	0.01	0.2	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards							
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values			
	MC	OS		Residential/Plant	Residential/Allotments	Commercial/Industrial	Other
Antimony	0.006	MC	0.5	OS	-	-	-
Copper	1.3	MC	1	OS	-	-	-
Lead (inorganic)	0.015	MC	50	OS	-	-	-
Molybdenum	-	-	10	OS	-	-	-
Zinc	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Aquatic Life Protection				Surface Water Quality Criteria					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Human Health Protection (mg/L)		Saltwater Fish (mg/L)	
Antimony	-	-	-	-	0.014	E	4.3	E	4.3	E
Copper	-	-	0.0036	T1	1.3	E	-	-	-	-
Lead (inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0169	T3
Molybdenum	-	-	-	-	-	-	-	-	-	-
Zinc	-	-	0.0842	T1	9.1	E	69	E	69	E

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1/(mg/kg/day)		Dermal Equivalent Slope Factor 1/(mg/kg/day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m ³)	
	Value	Code	Value	Code	Value	Code	Value	Code	Value	Code	Value	Code
Antimony	0.0004	EPA1	0.0004	D2	-	-	-	-	-	-	-	-
Copper	0.04	TX11	0.04	D2	-	-	-	-	-	-	-	-
Lead (inorganic)	-	-	-	-	-	-	0.0005	-	-	-	0.00012	-
Molybdenum	0.005	EPA1	0.005	D2	-	-	-	-	-	-	-	-
Zinc	0.3	EPA1	0.3	D2	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	350	350	350	NA	6	180	-
EFD Exposure frequency for dermal exposure	350	350	350	NA	6	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	2.053	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.887	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Commercial	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Date Completed: 30-nov-yy

Surface Soil Column Parameters		Value	(Units)
h_{cap}	Capillary zone thickness	NA	(m)
h_v	Vadose zone thickness	NA	(m)
ρ_s	Soil bulk density	1,7	(g/cm ³)
f_{oc}	Fraction organic carbon	0,01	(-)
θ_T	Soil total porosity	0,41	(-)
		<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w	Volumetric water content	0,369	(-)
θ_a	Volumetric air content	0,041	(-)
K_{vs}	Vertical hydraulic conductivity	864	(cm/d)
k_v	Vapor permeability	1E-12	(m ²)
L_{gw}	Depth to groundwater	NA	(m)
pH	Soil/groundwater pH	6,8	(-)
W	Length of source-zone area parallel to wind	45	(m)
W_{gw}	Length of source-zone area parallel to GW flow	NA	(m)
L_{ss}	Thickness of affected surface soils	1	(m)
A	Source zone area	2025	(m ²)
L_s	Depth to top of affected soils	0	(m)
L_{base}	Depth to base of affected soils	1	(m)
L_{subs}	Thickness of affected soils	1	(m)

Outdoor Air Parameters		Value	(Units)
U_{air}	Ambient air velocity in mixing zone	2,25	(m/s)
h_{air}	Air mixing zone height	2	(m)
Q/C	Inverse mean concentration at the center of source	NA	
P_a	Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_l	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependant on Um/Ut	NA	
PEF	Particulate Emission Factor	6,9E-12	

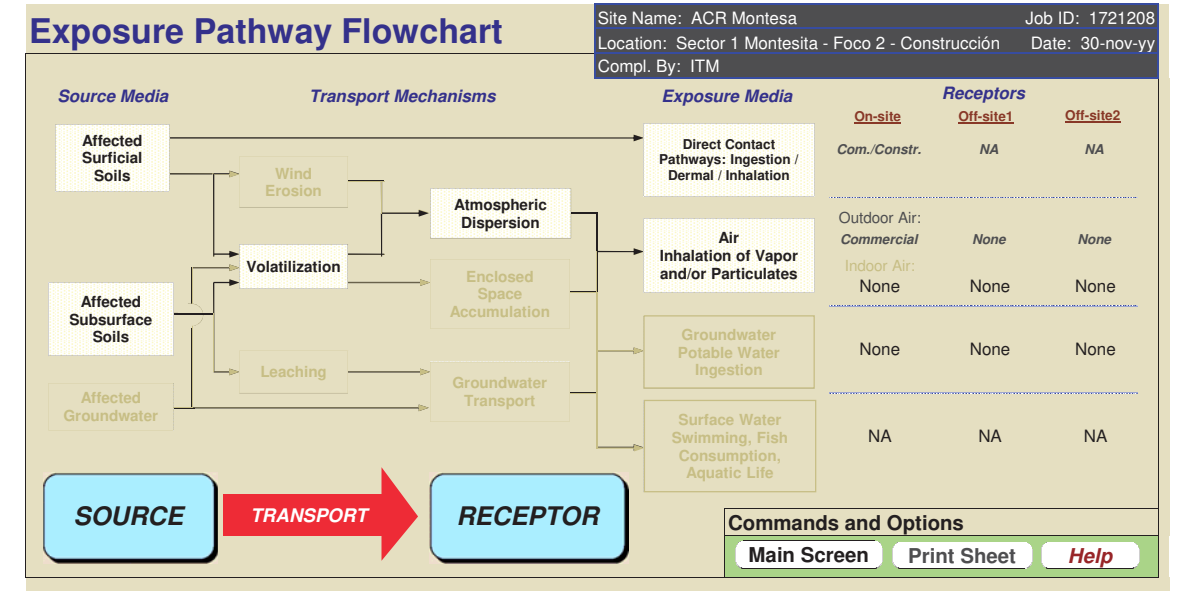
Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	NA	(m)
A_b	Foundation area	NA	NA	(m ²)
X_{crk}	Foundation perimeter	NA	NA	(m)
ER	Building air exchange rate	NA	NA	(1/s)
L_{crk}	Foundation thickness	NA	NA	(m)
Z_{crk}	Depth to bottom of foundation slab	NA	NA	(m)
η	Foundation crack fraction	NA	NA	(-)
dP	Indoor/outdoor differential pressure	NA	NA	(g/cm ² /s ²)
Q_s	Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	NA	NA	(-)
θ_{acrack}	Volumetric air content of cracks	NA	NA	(-)
BV	Building Volume	NA	NA	(m ³)
W	Building Width Perpendicular to GW flow	NA	NA	(m)
L	Building Length Parallel to GW flow	NA	NA	(m)
V	Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	NA	(m)
I_r	Net groundwater infiltration rate	NA	(cm/yr)
U_{gw}	Groundwater Darcy velocity	NA	(cm/d)
V_{gw}	Groundwater seepage velocity	NA	(cm/d)
K_s	Saturated hydraulic conductivity	NA	(cm/d)
i	Groundwater gradient	NA	(-)
S_w	Width of groundwater source zone	NA	(m)
S_d	Depth of groundwater source zone	NA	(m)
θ_{eff}	Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	Groundwater pH	NA	(-)
	Biodegradation considered?	NA	

Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		<u>Groundwater Ingestion</u>		<u>Groundwater to Indoor Air</u>		
α_x	Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport		<u>Soil to Outdoor Air Inhal.</u>		<u>GW to Outdoor Air Inhal.</u>		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(m ³ /s)
W_{pl}	Width of GW plume at SW discharge	NA	(m)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(m)
DF _{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
 Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data													
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)		Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))	
				(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mm Hg)	(unitless)	(log(L/kg))	(log(L/kg))		
Antimony	7440-36-0	M	121.75	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.65E+00	Kd	TX11
Copper	7440-50-8	M	63.546	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.60E+00	Kd	TX11
Lead (Inorganic)	7439-92-1	M	207.2	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Molybdenum	7439-98-7	M	95.94	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.30E+00	Kd	TX11
Zinc	7440-66-6	M	65.39	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																
Constituent	pH specific Kd for non-organics										log(Kow) (@ 20 - 25 C) (log(L/kg))	Diffusion Coefficients				
	Surface Soil Column					Water Bearing Unit						Air (cm ² /s)	Water (cm ² /s)			
	Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)							
Antimony	-	-	-	-	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Copper	-	-	-	-	-	-	-	-	-	-	-5.71E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Lead (Inorganic)	-	-	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Molybdenum	-	-	-	-	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Zinc	2.37E-01	1.80E-01	1.79E+00	2.37E-01	1.80E-01	1.79E+00	E2	-4.71E-01	TX11	0.00E+00	TX11	0.00E+00	TX11			

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters													
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors			Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)	TX11	TX11	TX11				
Antimony	3.00E-03	MC	-	-	-	-	7.00E-02	3.00E-02	TX11	1.00E+00	TX11	-	-
Copper	6.00E-02	S	6.00E-03	S	-	-	2.90E-01	2.50E-01	TX11	1.00E+00	TX11	-	-
Lead (Inorganic)	-	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-
Molybdenum	-	-	-	-	-	-	1.00E-01	6.00E-02	TX08	1.00E+00	TX11	-	-
Zinc	5.00E-03	S	2.00E-03	S	-	-	9.00E-02	4.40E-02	TX11	1.00E+00	TX11	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm ² /hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Antimony	-	-	-	-	-	-
Copper	0.001	-	-	-	-	D
Lead (Inorganic)	-	-	-	-	-	-
Molybdenum	0.001	-	-	-	-	D
Zinc	0.0006	-	-	-	-	D

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Derma Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Derma (unitless)	Gastrointestinal (unitless)	
		Change - One or more parameter differs from User Chemical Database		
Antimony	0.066666667	0.01	0.15	TX11
Copper	0.01754386	0.01	0.57	TX11
Lead (inorganic)	0.066666667	0.01	0.15	TX11
Molybdenum	0.026315789	0.01	0.38	TX11
Zinc	0.05	0.01	0.2	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values				
	MC	OS		Residential/P lant	Residential/W o Plant	Allotments	Commercial/I d.	
				mg/kg	mg/kg	mg/kg	mg/kg	
Antimony	0.006	MC	0.5	OS	-	-	-	-
Copper	1.3	MC	1	OS	-	-	-	-
Lead (inorganic)	0.015	MC	50	OS	-	-	-	-
Molybdenum	-	-	10	OS	-	-	-	-
Zinc	-	-	-	OS	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Antimony	-	-	-	-	0.014	E	4.3	E	4.3	E
Copper	-	-	0.0036	T1	1.3	E	-	-	-	-
Lead (inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0189	T3
Molybdenum	-	-	-	-	-	-	-	-	-	-
Zinc	-	-	0.0842	T1	9.1	E	69	E	69	E

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters													
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1 (mg/kg-day)		Dermal Equivalent Slope Factor 1 (mg/kg-day)		Inhalation Equivalent Unit Risk Factor 1 (µg/m ³)		
	Antimony	0.0004	EPA-1	0.0004	D2	-	-	-	-	-	-	-	-
	Copper	0.04	TX11	0.04	D2	-	-	-	-	-	-	-	-
Lead (inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00012	-	
Molybdenum	0.005	EPA-1	0.005	D2	-	-	-	-	-	-	-	-	
Zinc	0.3	EPA-1	0.3	D2	-	-	-	-	-	-	-	-	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	30	30	30	NA	250	30	-
EFD	30	30	30	NA	250	30	-
IRw	1	1	2	2,5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0,5	0,5	0,05	0,3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0,025	0,025	0,025	0,053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg	0,01	0,01	0,01	NA	NA	NA	NA
VGabg	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_d Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1,3	(m)
L_{sub} Thickness of affected soils	1,3	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
z_{air} Air mixing zone height	2	(m)
Q/C	NA	
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	NA	
U_m Mean annual airvelocity at 7m	NA	
U_t Equivalent 7m air velocity threshold value	NA	
F(x)	NA	
PEF	6,9E-12	

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

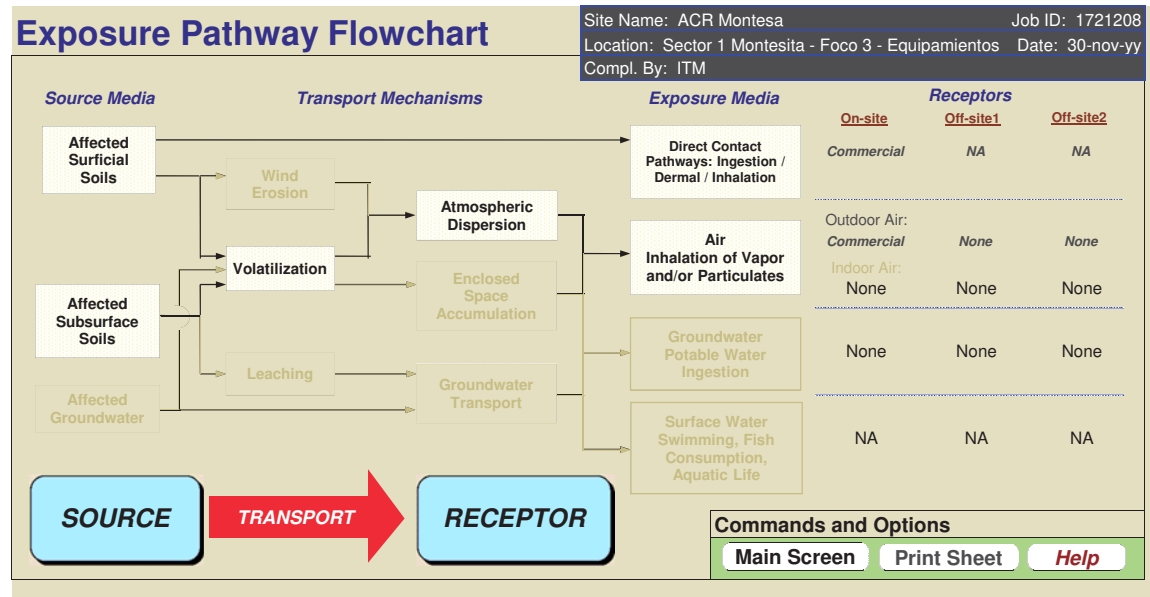
Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_i Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C)					
				(mg/L)	(mg/L)				log (Koc)	log (Kd)				
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+08	0.00E+00	TX11	1.00E+00	Kd	TX11		
TPH - Alph >C16-C21	T-al1621	OT	270	TPH	0.0000025	TPH	1.58E+01	8.36E-04	TPH	4.90E+03	TPH	8.80E+00	Koc	TPH
TPH - Alph >C21-C34	T-al2134	OT	400	-	0.0000025	-	1.58E+01	3.34E-07	-	7.26E+03	-	8.80E+00	Koc	-
TPH - Arom >C16-C21	T-ar1621	OT	190	TPH	0.65	TPH	1.03E-02	8.36E-04	TPH	1.33E-02	TPH	4.20E+00	Koc	TPH
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Phenanthrene	85-01-6	O	178.2334	TX11	0.994	TX11	1.40E+02	6.80E-04	TX11	6.40E-03	TX11	4.10E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Butyl benzyl phthalate	85-68-7	O	312.3654	TX11	2.9	TX11	3.99E+02	1.20E-05	TX11	7.94E-05	TX11	4.14E+00	Koc	TX11
Trimethylbenzene, 1,3,5-	108-67-8	O	120.19	TX11	51.48	TX11	5.32E+02	2.13E+00	TX11	2.72E-01	TX11	3.01E+00	Koc	TX11
Trimethylbenzene, 1,2,4-	95-63-6	O	120.19	TX11	56.3	TX11	5.35E+02	1.99E+00	TX11	1.84E-01	TX11	2.97E+00	Koc	TX11
Trichloroethane, 1,1,1-	71-55-6	O	133.40482	TX11	1330	TX11	1.71E+03	1.24E+02	TX11	7.15E-01	TX11	2.04E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)		Water (cm ² /s)		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
<i>Orange - One or more parameter differs from User Chemical Database</i>												
Lead (Inorganic)	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-
TPH - Arom >C16-C21	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
Phenanthrene	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Benzo-g,h,i-perylene	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11
Butyl benzyl phthalate	-	-	-	-	-	-	4.84E+00	TX11	1.74E-02	TX11	4.83E-06	TX11
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-	3.70E+00	TX11	6.21E-02	TX11	7.23E-06	TX11
Trimethylbenzene, 1,2,4-	-	-	-	-	-	-	3.65E+00	TX11	6.22E-02	TX11	7.28E-06	TX11
Trichloroethane, 1,1,1-	-	-	-	-	-	-	2.68E+00	TX11	7.60E-02	TX11	8.60E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
<i>Orange - One or more parameter differs from User Chemical Database</i>												
Lead (Inorganic)	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	890000 LY
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	890000 LY
TPH - Arom >C16-C21	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	790 LY
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	10000 LY
Phenanthrene	1.00E-02	S2	6.60E-01	S2	4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.98E+00	6.78E+01
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2	6.60E-01	S2	3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	8.74E+04
Butyl benzyl phthalate	1.00E-02	S2	6.60E-01	S2	1.80E+02	1.80E+02	H	-	1.00E+00	TX11	5.99E+00	1.63E+02
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-	-	-	1.00E+00	TX11	5.20E+00	2.22E+01
Trimethylbenzene, 1,2,4-	-	-	-	-	5.60E+01	5.60E+01	H	-	1.00E+00	TX11	5.05E+00	2.03E+01
Trichloroethane, 1,1,1-	5.00E-03	S	5.00E-03	S	5.46E+02	5.46E+02	H	-	1.00E+00	TX11	2.22E+00	4.31E+00

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
TPH - Aliph >C16-C21	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C16-C21	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Butyl benzyl phthalate	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-
Trimethylbenzene, 1,2,4-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	0.017	0.57	1.4	0.031	0.070011969	D

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.066666667	0.01	0.15	TX11
TPH - Aliph >C16-C21	0.2	0.1	0.5	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C16-C21	0.146067416	0.13	0.89	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11
Butyl benzyl phthalate	0.163934426	0.1	0.61	TX11
Trimethylbenzene, 1,3,5-	0	0	0.8	TX11
Trimethylbenzene, 1,2,4-	0	0	0.8	TX11
Trichloroethane, 1,1,1-	0	0	0.9	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards							
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values			
	MC	OS		Residential/Pl	Residential/Plant	Allotments	Commercial/Industrial
Lead (Inorganic)	0.015	MC	50	OS			
TPH - Aliph >C16-C21	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-
TPH - Arom >C16-C21	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-
Butyl benzyl phthalate	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-	-
Trimethylbenzene, 1,2,4-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	0.2	MC	1900	OS	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	-	-	
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	
TPH - Arom >C16-C21	-	-	-	-	-	-	-	-	-	
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E
Butyl benzyl phthalate	-	-	-	-	-	-	-	-	-	
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-	-	-	-	
Trimethylbenzene, 1,2,4-	-	-	-	-	-	-	-	-	-	
Trichloroethane, 1,1,1-	-	-	-	-	0.2	T3	12,586	T3	8,391	T3

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	350	350	350	NA	6	180	-
EFD Exposure frequency for dermal exposure	350	350	350	NA	6	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	2.053	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.887	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Commercial	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m³)		Oral Equivalent Slope Factor 1/(mg/kg-day)		Dermal Equivalent Slope Factor 1/(mg/kg-day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m³)	
	Value	Code	Value	Code	Value	Code	Value	Code	Value	Code	Value	Code
Lead (Inorganic)	-	-	-	-	-	-	0.0005	C/MEPA	-	-	0.00012	CatEpa
TPH - Aliph >C16-C21	2	TX11	2	D2	-	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	
TPH - Arom >C16-C21	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	
Bis (2-ethylhexyl) phthalate	0.02	EPA1	0.02	D2	-	-	0.014	EPA1	0.014	D2	-	
Butyl benzyl phthalate	0.2	EPA1	0.2	D2	-	-	0.0019	TX11	0.0019	D2	-	
Trimethylbenzene, 1,3,5-	0.05	TX11	0.05	D2	0.006	TX11	-	-	-	-	-	
Trimethylbenzene, 1,2,4-	0.05	TX11	0.05	D2	0.007	TX11	-	-	-	-	-	
Trichloroethane, 1,1,1-	2	EPA1	2	D2	5	EPA1	-	-	-	-	-	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
	<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w Volumetric water content	0,369	(-)
θ_a Volumetric air content	0,041	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
k_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH Soil/groundwater pH	6,8	(-)
W Length of source-zone area parallel to wind	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A Source zone area	2025	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1	(m)
L_{subs} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
ρ_{air} Air mixing zone height	2	(m)
Q/C Inverse mean concentration at the center of source	NA	
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V Fraction of vegetative cover	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x) Windspeed function dependant on Um/Ut	NA	
PEF Particulate Emission Factor	6,9E-12	

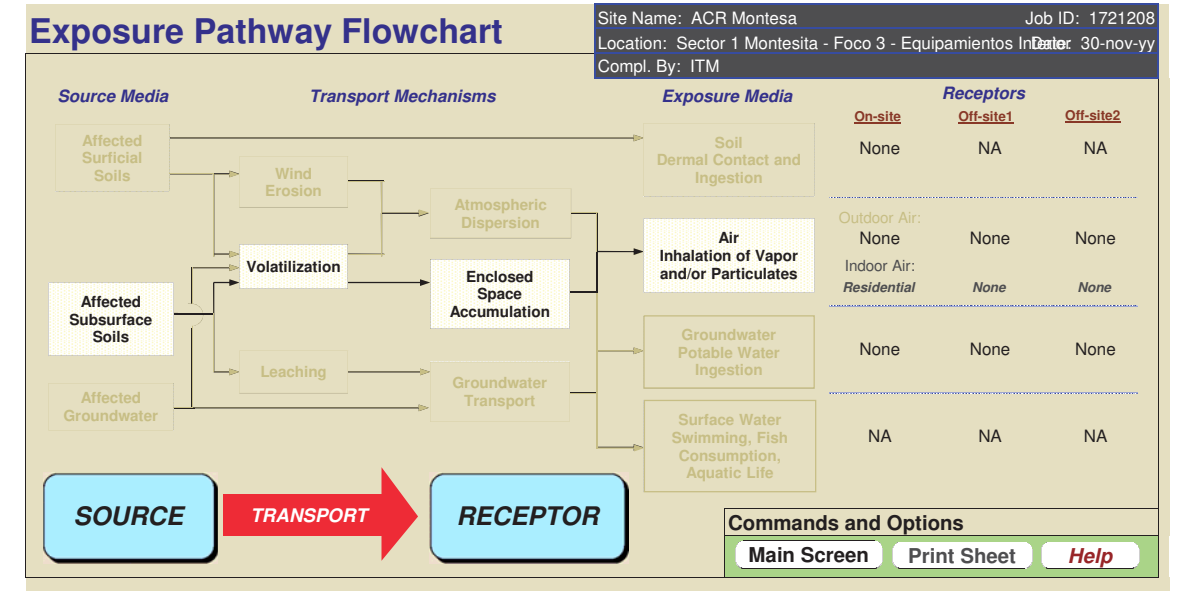
Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER Building air exchange rate	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP Indoor/outdoor differential pressure	NA	NA	(g/cm/s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV Building Volume	NA	NA	(m ³)
W Building Width Perpendicular to GW flow	NA	NA	(m)
L Building Length Parallel to GW flow	NA	NA	(m)
V Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters	Value	(Units)
δ_{gw} Groundwater mixing zone depth	NA	(m)
I_r Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i Groundwater gradient	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat} Groundwater pH	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{pl} Width of GW plume at SW discharge	NA	(m)
δ_{pl} Thickness of GW plume at SW discharge	NA	(m)
DF _{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
 Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))			
				TX11	TX11	TX11	TX11	TX11	TX11	TX11	TX11			
<i>Change - One or more parameter differs from User Chemical Database</i>														
Lead (Inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
TPH - Aliph >C16-C21	T-al1621	OT	270	TPH	0.0000025	TPH	1.58E+01	8.36E-04	TPH	4.90E+03	TPH	8.80E+00	Koc	TPH
TPH - Aliph >C21-C34	T-al2134	OT	400	-	0.0000025	-	1.58E+01	3.34E-07	-	7.26E+03	-	8.80E+00	Koc	-
TPH - Arom >C16-C21	T-ar1621	OT	190	TPH	0.65	TPH	1.03E+02	8.36E-04	TPH	1.33E-02	TPH	4.20E+00	Koc	TPH
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.80E-04	TPH	5.10E+00	Koc	TPH
Phenanthrene	85-01-8	O	178.2334	TX11	0.394	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Butyl benzyl phthalate	85-68-7	O	312.3654	TX11	2.9	TX11	3.99E+02	1.20E-05	TX11	7.94E-05	TX11	4.14E+00	Koc	TX11
Trimethylbenzene, 1,3,5-	108-67-8	O	120.19	TX11	51.48	TX11	5.32E+02	2.13E+00	TX11	2.72E-01	TX11	3.01E+00	Koc	TX11
Trimethylbenzene, 1,2,4-	95-63-6	O	120.19	TX11	56.8	TX11	5.35E+02	1.59E+00	TX11	1.84E-01	TX11	2.97E+00	Koc	TX11
Trichloroethane, 1,1,1-	71-65-6	O	133.40482	TX11	1330	TX11	1.71E+03	1.24E+02	TX11	7.15E-01	TX11	2.04E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos Interior
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																	
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics													
				Surface Soil Column			Water Bearing Unit			log(Kow) (@ 20 - 25 C) (log(L/kg))	Diffusion Coefficients						
				Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)		Air (cm ² /s)	Water (cm ² /s)					
<i>Change - One or more parameter differs from User Chemical Database</i>																	
Lead (Inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
TPH - Aliph >C16-C21	T-al1621	OT	270	-	-	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
TPH - Aliph >C21-C34	T-al2134	OT	400	-	-	-	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-
TPH - Arom >C16-C21	T-ar1621	OT	190	-	-	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
TPH - Arom >C21-C35	T-ar2134	OT	240	-	-	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
Phenanthrene	85-01-8	O	178.2334	-	-	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	-	-	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	-	-	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11
Butyl benzyl phthalate	85-68-7	O	312.3654	-	-	-	-	-	-	-	-	4.84E+00	TX11	1.74E-02	TX11	4.83E-06	TX11
Trimethylbenzene, 1,3,5-	108-67-8	O	120.19	-	-	-	-	-	-	-	-	3.70E+00	TX11	6.21E-02	TX11	7.23E-06	TX11
Trimethylbenzene, 1,2,4-	95-63-6	O	120.19	-	-	-	-	-	-	-	-	3.85E+00	TX11	6.22E-02	TX11	7.28E-06	TX11
Trichloroethane, 1,1,1-	71-65-6	O	133.40482	-	-	-	-	-	-	-	-	2.68E+00	TX11	7.60E-02	TX11	8.80E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos Interior
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters													
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors			Relative Bioavailability Factor	Leaf Conc. Calculated (mg/kg)(mg/L)	Root Conc. Calculated (mg/kg)(mg/L)	Bioconcentration Factor		
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)							
Change - One or more parameter differs from User Chemical Database													
Leaf (Inorganic)	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	-	
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	1.00E+00	TX11	-	890000	LY	
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	1.00E+00	TX11	-	890000	LY	
TPH - Arom >C16-C21	-	-	-	-	-	-	-	1.00E+00	TX11	-	790	LY	
TPH - Arom >C21-C35	-	-	-	-	-	-	-	1.00E+00	TX11	-	10000	LY	
Phenanthrene	1.00E-02	S2 6.60E-01	S2 4.00E+02	4.00E+02	H	-	-	1.00E+00	TX11	6.38E+00	6.78E+01	2630 LY	
Benzo-g,h,i-perylene	1.00E-02	S2 6.60E-01	S2 1.80E+03	1.30E+03	H	-	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000 LY	
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2 6.60E-01	S2 3.89E+02	3.89E+02	H	-	-	1.00E+00	TX11	1.10E-02	8.74E+04	850 LY	
Butyl benzyl phthalate	1.00E-02	S2 6.60E-01	S2 1.80E+02	1.80E+02	H	-	-	1.00E+00	TX11	5.99E+00	1.63E+02	772 LY	
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-	-	1.00E+00	TX11	5.20E+00	2.22E+01	380 LY	
Trimethylbenzene, 1,2,4-	-	-	-	5.60E+01	5.60E+01	H	-	-	1.00E+00	TX11	5.05E+00	2.03E+01	350 LY
Trichloroethane, 1,1,1-	5.00E-03	S 5.00E-03	S 5.46E+02	5.46E+02	H	-	-	1.00E+00	TX11	2.22E+00	4.31E+00	9 LY	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Change - One or more parameter differs from User Chemical Database						
Leaf (Inorganic)	-	-	-	-	-	-
TPH - Aliph >C16-C21	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C16-C21	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Butyl benzyl phthalate	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-
Trimethylbenzene, 1,2,4-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	0.017	0.57	1.4	0.031	0.070011969	D

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
		0.01	0.15	
Lead (Inorganic)	0.06666667			
TPH - Aliph >C16-C21	0.2	0.1	0.5	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C16-C21	0.146067416	0.13	0.89	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11
Butyl benzyl phthalate	0.163934426	0.1	0.61	TX11
Trimethylbenzene, 1,3,5-	0	0	0.8	TX11
Trimethylbenzene, 1,2,4-	0	0	0.8	TX11
Trichloroethane, 1,1,1-	0	0	0.9	TX11

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values			
	MC	OS	Residential/Plant	Residential/Allotments	Commercial/Industrial	Residential/Plant	Residential/Allotments	Commercial/Industrial
	0.015	MC	50	OS	mg/kg	mg/kg	mg/kg	mg/kg
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-
TPH - Arom >C16-C21	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-	-
Butyl benzyl phthalate	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,2,4-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	0.2	MC	1900	OS	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards									
Constituent	Surface Water Quality Criteria								
	Aquatic Life Protection			Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)	Marine (mg/L)	Drink & Freshwater Fish (mg/L)	Freshwater Fish (mg/L)	Freshwater Fish (mg/L)	Freshwater Fish (mg/L)	Freshwater Fish (mg/L)	Freshwater Fish (mg/L)	Saltwater Fish (mg/L)
Lead (Inorganic)	-	-	0.0053 T1	0.00498 T3	0.025 T3	0.0189 T3	-	-	-
TPH - Aliph >C16-C21	-	-	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-
TPH - Arom >C16-C21	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03 T1	0.0046 T1	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	0.018 E	0.059 E	0.059 E	0.059 E	-	-	-
Butyl benzyl phthalate	-	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,3,5-	-	-	-	-	-	-	-	-	-
Trimethylbenzene, 1,2,4-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	-	-	0.2 T3	12.586 T3	8.391 T3	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)	
	RID	TDSI	RID	TDSI	RIC	TCA	Slope Factor	Slope Factor	Unit Risk Factor	Unit Risk Factor	Unit Risk Factor	
	Lead (Inorganic)	-	-	-	-	-	-	0.0005 CalEPA	-	-	0.000012 CalEPA	-
TPH - Aliph >C16-C21	2 TX11	2 D2	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	1.6 TX11	1.6 D2	-	-	-	-	-	-	-	-	-	
TPH - Arom >C16-C21	0.03 TPH	0.03 D2	-	-	-	-	-	-	-	-	-	
TPH - Arom >C21-C35	0.03 TPH	0.03 D2	-	-	-	-	-	-	-	-	-	
Phenanthrene	0.03 TX11	0.03 D2	-	-	-	-	-	-	-	-	-	
Benzo-g,h,i-perylene	0.03 TX11	0.03 D2	-	-	-	-	-	-	-	-	-	
Bis (2-ethyl-hexyl) phthalate	0.02 EPA-I	0.02 D2	-	-	0.014 EPA-I	0.014 D2	-	-	-	-	-	
Butyl benzyl phthalate	0.2 EPA-I	0.2 D2	-	-	0.0019 TX11	0.0019 D2	-	-	-	-	-	
Trimethylbenzene, 1,3,5-	0.05 TX11	0.05 D2	0.006 TX11	-	-	-	-	-	-	-	-	
Trimethylbenzene, 1,2,4-	0.05 TX11	0.05 D2	0.007 TX11	-	-	-	-	-	-	-	-	
Trichloroethane, 1,1,1-	2 EPA-I	2 D2	5 EPA-I	-	-	-	-	-	-	-	-	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Interior Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	125	125	125	NA	6	180	-
EFD	125	125	125	NA	6	180	-
IRw	1	1	2	2.5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0.5	0.5	0.05	0.3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0.025	0.025	0.025	0.053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0.002	0.002	0.006	0.733	NA	NA	NA
IRabg	0.001	0.001	0.002	0.317	NA	NA	NA
VGbg	0.01	0.01	0.01	NA	NA	NA	NA
VGabg	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	None	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	Residential	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	NA	NA	NA	(m)
Indoor air inhalation receptor	0	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	NA
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Interior Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	Length of source-zone area parallel to wind	(m)
W_{gw}	Length of source-zone area parallel to GW flow	(m)
L_{ss}	Thickness of affected surface soils	(m)
A	Source zone area	(m ²)
L_{top}	Depth to top of affected soils	(m)
L_{base}	Depth to base of affected soils	(m)
L_{sub}	Thickness of affected soils	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	NA	(m/s)
h_{mix} Air mixing zone height	NA	(m)
Q/C	Inverse mean concentration at the center of source	(g/cm ² /s)
P_a	Areal particulate emission rate	(g/cm ² /s)
V	Fraction of vegetative cover	(-)
U_m	Mean annual airvelocity at 7m	(m/s)
U_t	Equivalent 7m air velocity threshold value	(m/s)
F(x)	Windspeed function dependant on Um/Ut	(-)
PEF	Particulate Emission Factor	(g/cm ² /s)

Building Parameters	Residential	Commercial	(Units)
L_b	2	NA	(m)
A_b	70	NA	(m ²)
X_{crk}	49	NA	(m)
ER	Building air exchange rate	0,00014	(1/s)
L_{crk}	Foundation thickness	0,15	(m)
Z_{crk}	Depth to bottom of foundation slab	0,15	(m)
η	Foundation crack fraction	0,001	(-)
dP	Indoor/outdoor differential pressure	0	(g/cm ² /s ²)
Q_s	Convective air flow through slab	0	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	0,12	(-)
θ_{acrack}	Volumetric air content of cracks	0,26	(-)
BV	Building Volume	NA	(m ³)
w	Building Width Perpendicular to GW flow	NA	(m)
L	Building Length Parallel to GW flow	NA	(m)
v	Saturated Soil Zone Porosity	NA	(-)

Groundwater Parameters	Value	(Units)
θ_{gw}	Groundwater mixing zone depth	(m)
I_i	Net groundwater infiltration rate	(cm/yr)
U_{gw}	Groundwater Darcy velocity	(cm/d)
V_{gw}	Groundwater seepage velocity	(cm/d)
K_s	Saturated hydraulic conductivity	(cm/d)
i	Groundwater gradient	(-)
S_w	Width of groundwater source zone	(m)
S_d	Depth of groundwater source zone	(m)
θ_{eff}	Effective porosity in water-bearing unit	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	(-)
pH _{sat}	Groundwater pH	(-)
	Biodegradation considered?	NA

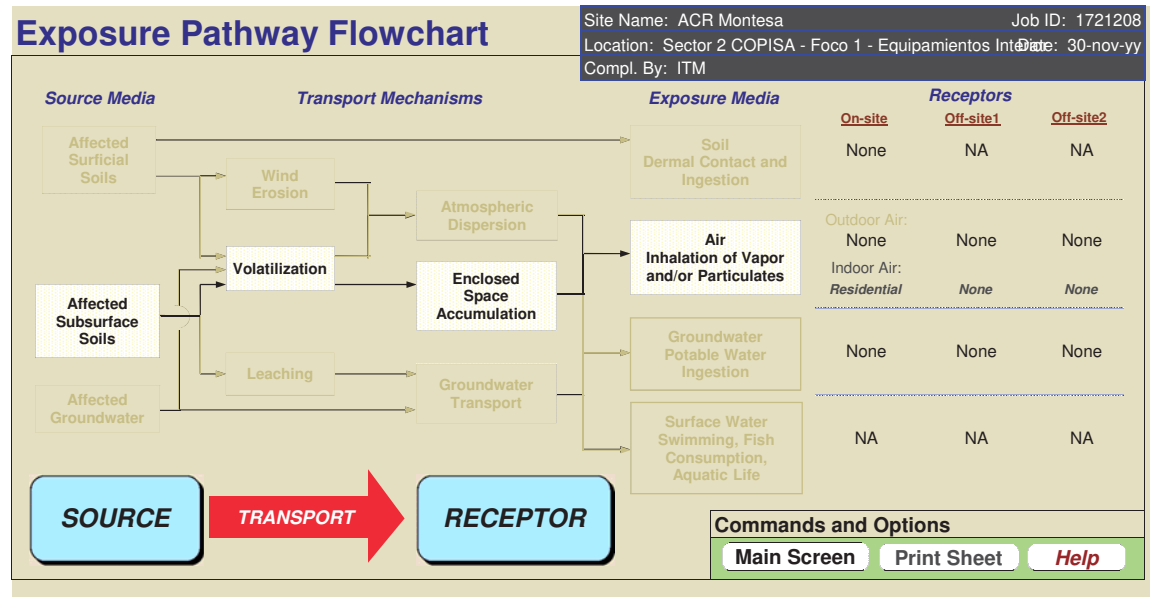
Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x	Longitudinal dispersivity	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y	Transverse dispersion coefficient	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw}	Surface water flowrate	(m ³ /s)
W_{sw}	Width of GW plume at SW discharge	(m)
δ_{sw}	Thickness of GW plume at SW discharge	(m)
DF_{sw}	Groundwater-to-surface water dilution factor	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

SECTOR 2 - COPISA



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)	Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C)		log (L/kg)				
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+08	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	TX11	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Phenanthrene	85-01-8	O	178.2334	TX11	0.994	TX11	1.40E-02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Antimony	7440-36-9	M	121.75	TX11	0	TX11	1.00E-06	0.00E+00	TX11	0.00E+00	TX11	1.85E+00	Kd	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56532	TX11	0.3	TX11	2.04E-03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Carbazole	86-74-8	O	167.21016	TX11	0.721	TX11	1.77E+01	2.66E-04	TX11	3.38E-03	TX11	3.39E+00	Koc	TX11
Dibenzofuran	132-64-9	O	168.1846	TX11	2.860642162	TX11	2.43E+02	1.64E-03	TX11	5.28E-03	TX11	3.93E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)		Water (cm ² /s)		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
Lead (inorganic)	-	-	-	-	-	-	7.29E+01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Benzo-g,h,i-perylene	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Phenanthrene	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Anthracene	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11
Carbazole	-	-	-	-	-	-	3.23E+00	TX11	3.90E-02	TX11	7.03E-06	TX11
Dibenzofuran	-	-	-	-	-	-	4.00E+00	TX11	5.51E-02	TX11	7.04E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)/(mg/L)	Root Concn. Calculated (mg/kg)/(mg/L)	Bioconcentration Factor
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
Lead (inorganic)	-	-	-	-	-	-	-	1.00E+00	TX11	2.06E+00	1.53E+03	26000
Benzo-a-pyrene	1.00E-02	S2 6.60E-01	S2 1.06E+03	1.06E+03	H	-	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000
Benzo-g,h,i-perylene	1.00E-02	S2 6.60E-01	S2 1.30E+03	1.30E+03	H	-	-	1.00E+00	TX11	6.38E-01	6.78E+01	2630
Phenanthrene	1.00E-02	S2 6.60E-01	S2 4.00E+02	4.00E+02	H	-	-	1.00E+00	TX11	1.00E+00	-	-
Anthracene	3.00E-03	MC	-	-	-	7.00E-02	3.00E-02	TX11	1.00E+00	-	-	-
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2 6.60E-01	S2 3.89E+02	3.89E+02	H	-	-	1.00E+00	TX11	1.10E-02	8.74E+04	850
Carbazole	-	-	-	-	-	-	-	1.00E+00	TX11	3.73E+00	1.01E+01	170
Dibenzofuran	-	-	-	-	H	-	-	1.00E+00	TX11	5.94E+00	3.89E+01	640

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Anthracene	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Anthracene	0.06666667	0.01	0.15	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11
Carbazole	0.142857143	0.1	0.7	TX11
Dibenzofuran	0.2	0.1	0.5	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards									
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values				
	MC	OS	MC	OS	Residential/Plant	Residential/Allotments	Commercial/Industrial	Residential/Plant	Residential/Allotments
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	0.5	OS	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-
Anthracene	-	-	-	-	0.014	E	4.3	E	4.3	E
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E
Carbazole	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	125	125	125	NA	6	180	-
EFD Exposure frequency for dermal exposure	125	125	125	NA	6	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.733	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.317	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	None	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	Residential	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	NA	NA	NA	(m)
Indoor air inhalation receptor	0	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	NA
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

CHEMICAL DATA FOR SELECTED COCs

Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m³)		Oral Equivalent Slope Factor 1/(mg/kg-day)		Dermal Equivalent Slope Factor 1/(mg/kg-day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m³)	
	Value	Pathway	Value	Pathway	Value	Pathway	Value	Pathway	Value	Pathway	Value	Pathway
Lead (Inorganic)	-	-	-	-	-	-	0.0065	-	-	-	0.00072	-
Benzo-a-pyrene	-	-	-	-	-	-	7.3	EPA-I	7.3	D2	0.00088	TX11
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Antimony	0.0004	EPA-I	0.0004	D2	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.02	EPA-I	0.02	D2	-	-	0.014	EPA-I	0.014	D2	-	-
Carbazole	-	-	-	-	-	-	0.02	TX11	0.02	D2	-	-
Dibenzofuran	0.004	TX11	0.004	D2	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Completed By: ITM Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
	<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w Volumetric water content	0,369	(-)
θ_a Volumetric air content	0,041	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
k_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH Soil/groundwater pH	6,8	(-)
W Length of source-zone area parallel to wind	NA	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	NA	(m)
A Source zone area	NA	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1	(m)
L_{subs} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	NA	(m/s)
h_{air} Air mixing zone height	NA	(m)
Q/C Inverse mean concentration at the center of source	NA	
P_a Areal particulate emission rate	NA	(g/cm ² /s)
V Fraction of vegetative cover	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x) Windspeed function dependent on Um/Ut	NA	
PEF Particulate Emission Factor	NA	

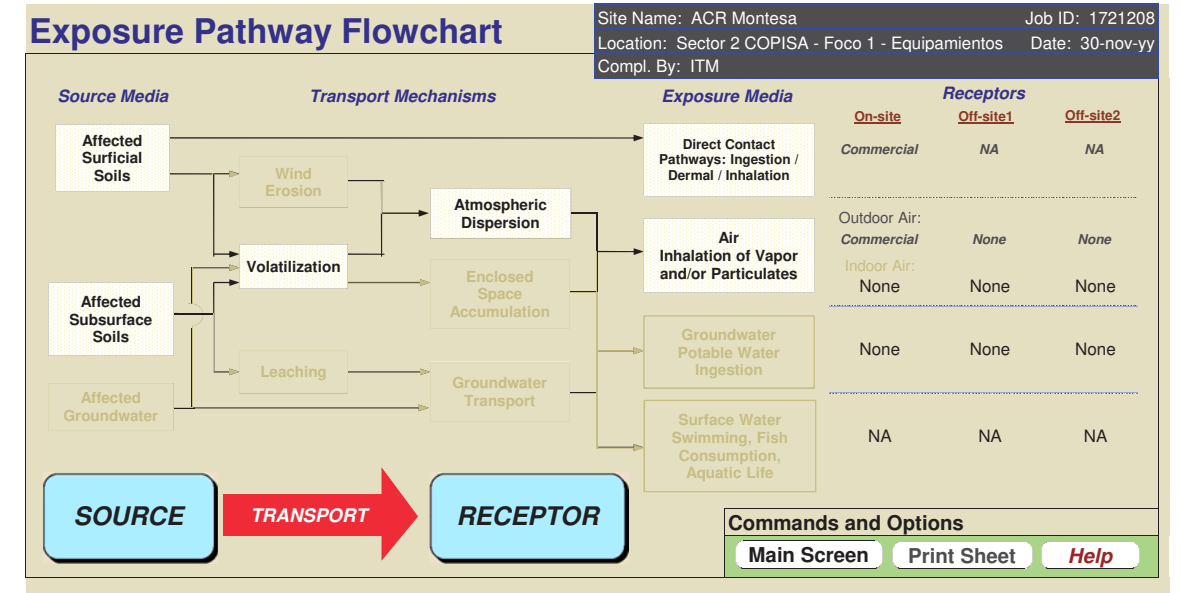
Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	2	NA	(m)
A_b Foundation area	70	NA	(m ²)
X_{crk} Foundation perimeter	49	NA	(m)
ER Building air exchange rate	0,00014	NA	(1/s)
L_{crk} Foundation thickness	0,15	NA	(m)
Z_{crk} Depth to bottom of foundation slab	0,15	NA	(m)
η Foundation crack fraction	0,001	NA	(-)
dP Indoor/outdoor differential pressure	0	NA	(g/cm/s ²)
Q_s Convective air flow through slab	0	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	0,12	NA	(-)
θ_{acrack} Volumetric air content of cracks	0,26	NA	(-)
BV Building Volume	NA	NA	(m ³)
W Building Width Perpendicular to GW flow	NA	NA	(m)
L Building Length Parallel to GW flow	NA	NA	(m)
V Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters	Value	(Units)
δ_{gw} Groundwater mixing zone depth	NA	(m)
I_r Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i Groundwater gradient	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat} Groundwater pH	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{pl} Width of GW plume at SW discharge	NA	(m)
δ_{pl} Thickness of GW plume at SW discharge	NA	(m)
DF _{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data													
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated		Vapor Pressure (@ 20 - 25 C)		Henry's Constant (@ 20 - 25 C)		log (Koc) or log (Kd) (@ 20 - 25 C)	
				(mg/L)	(mg/L)	(mg/kg)	(mm Hg)	(unitless)	(unitless)	(log(L/kg))	(log(L/kg))		
<i>Change - One or more parameter differs from User Chemical Database</i>													
Lead (Inorganic)	7439-92-1	M	207.2	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Phenanthrene	85-01-8	O	178.2334	0.094	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Antimony	7440-36-0	M	121.75	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.65E+00	Kd	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Carbazole	86-74-8	O	167.21016	0.721	TX11	1.77E+01	2.66E-04	TX11	3.38E-03	TX11	3.39E+00	Koc	TX11
Dibenzofuran	132-64-9	O	166.1846	2.860642162	TX11	2.43E+02	1.84E-03	TX11	5.28E-03	TX11	3.93E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																		
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics														
				Surface Soil Column				Water Bearing Unit				log(Kow) (@ 20 - 25 C)	Diffusion Coefficients					
				Slope	y-Intercept	logKd_pH (L/kg)	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)	logKd_pH (L/kg)		log(L/kg)	Air (cm ² /s)	Water (cm ² /s)			
<i>Change - One or more parameter differs from User Chemical Database</i>																		
Lead (Inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	-	-	-	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	-	-	-	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Phenanthrene	85-01-8	O	178.2334	-	-	-	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Antimony	7440-36-0	M	121.75	-	-	-	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	-	-	-	-	-	-	-	-	-	8.39E+00	TX11	0.51E-02	TX11	3.66E-06	TX11
Carbazole	86-74-8	O	167.21016	-	-	-	-	-	-	-	-	-	3.23E+00	TX11	3.90E-02	TX11	7.03E-06	TX11
Dibenzofuran	132-64-9	O	166.1846	-	-	-	-	-	-	-	-	-	4.00E+00	TX11	5.51E-02	TX11	7.04E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters													
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Conc. Calculated (mg/kg)(mg/L)	Root Conc. Calculated (mg/kg)(mg/L)	Bioconcentration Factor			
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)							
<i>Change - One or more parameter differs from User Chemical Database</i>													
Leaf (Inorganic)	-	-	-	-	-	-	-	-	-	-	-	-	
Benzo-a-pyrene	1.00E-02	S2 6.60E-01	S2 1.06E+03	1.06E+03	H	-	-	1.00E+00	TX11 2.06E+00	1.53E+03	26000	LY	
Benzo-g,h,i-perylene	1.00E-02	S2 6.60E-01	S2 1.30E+03	1.30E+03	H	-	-	1.00E+00	TX11 8.06E-01	4.33E+03	72000	LY	
Phenanthrene	1.00E-02	S2 6.60E-01	S2 4.00E+02	4.00E+02	H	-	-	1.00E+00	TX11 6.38E+00	6.78E+01	2630	LY	
Anthroney	3.00E-03	MD	-	-	-	7.00E-02	3.00E-02	TX11 1.00E+00	-	-	-	-	
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2 6.60E-01	S2 3.89E+02	3.89E+02	H	-	-	1.00E+00	TX11 1.10E-02	8.74E+04	850	LY	
Carbazole	-	-	-	-	-	-	-	1.00E+00	TX11 3.73E+00	1.01E+01	170	LY	
Dibenzofuran	-	-	-	3.50E+01	3.50E+01	H	-	-	1.00E+00	TX11 5.94E+00	3.69E+01	640	LY

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
<i>Change - One or more parameter differs from User Chemical Database</i>						
Leaf (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Anthroney	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Anthracy	0.06666667	0.01	0.15	TX11
Bis (2-ethyl-hexyl) phthalate	0.529315789	0.1	0.19	TX11
Carbazole	0.142857143	0.1	0.7	TX11
Dibenzofuran	0.2	0.1	0.5	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values			
	MC	OS	Residential/Plant	Residential/Allotments	Commercial/Industrial	Residential/Plant	Residential/Allotments	Commercial/Industrial
Lead (Inorganic)	0.015	MC	50	OS	mg/kg	mg/kg	mg/kg	mg/kg
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-
Anthracy	0.006	MC	0.5	OS	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-	-
Carbazole	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00496	T3	0.025	T3	0.0189	T3
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-
Anthracy	-	-	-	-	0.014	E	4.3	E	4.3	E
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E
Carbazole	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)	
	Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072
Benzo-a-pyrene	-	-	-	-	-	-	7.3	EPA-I	7.3	D2	0.00088	TX11
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Anthracy	0.0004	EPA-I	0.0004	D2	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.02	EPA-I	0.02	D2	-	-	0.014	EPA-I	0.014	D2	-	-
Carbazole	-	-	-	-	-	-	0.02	TX11	0.02	D2	-	-
Dibenzofuran	0.004	TX11	0.004	D2	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	350	350	350	NA	6	180	-
EFD	350	350	350	NA	6	180	-
IRw	1	1	2	2.5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0.5	0.5	0.05	0.3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0.025	0.025	0.025	0.053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0.002	0.002	0.006	2.053	NA	NA	NA
IRabg	0.001	0.001	0.002	0.887	NA	NA	NA
VGbg	0.01	0.01	0.01	NA	NA	NA	NA
VGabg	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Commercial	NA	NA
Apply CLEA- UK SGV levels	No	No	No
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary: 0,369 vadose: 0,08 foundation: 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1	(m)
L_{sub} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
Q_{air} Air mixing zone height	2	(m)
Q/C	NA	(g/cm ² /s)
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	NA	(-)
U_m Mean annual airvelocity at 7m	NA	(m/s)
U_l Equivalent 7m air velocity threshold value	NA	(m/s)
F(x)	NA	(-)
PEF	6,9E-12	(-)

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

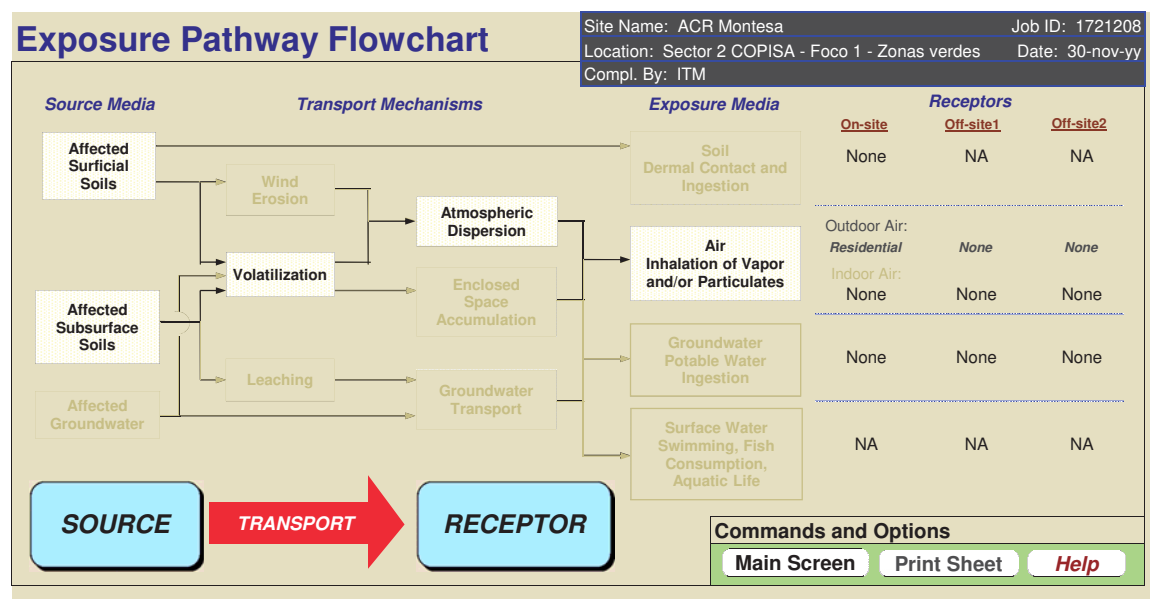
Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_i Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	(-)

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C)					
				(mg/L)	(mg/L)				(log(L/kg))	(log(L/kg))				
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+08	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	TX11	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Phenanthrene	85-01-8	O	178.2334	TX11	0.994	TX11	1.40E-02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Antimony	7440-36-9	M	121.75	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.85E+00	Kd	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.55332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Carbazole	86-74-8	O	167.21016	TX11	0.721	TX11	1.77E+01	2.66E-04	TX11	3.38E-03	TX11	3.39E+00	Koc	TX11
Dibenzofuran	132-64-9	O	168.1846	TX11	2.860642162	TX11	2.43E+02	1.64E-03	TX11	5.28E-03	TX11	3.93E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)		Water (cm ² /s)		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
Lead (inorganic)	-	-	-	-	-	-	7.29E+01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Benzo-g,h,i-perylene	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Phenanthrene	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Anthracene	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11
Carbazole	-	-	-	-	-	-	3.23E+00	TX11	3.90E-02	TX11	7.03E-06	TX11
Dibenzofuran	-	-	-	-	-	-	4.00E+00	TX11	5.51E-02	TX11	7.04E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters														
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)/(mg/L)	Root Concn. Calculated (mg/kg)/(mg/L)	Bioconcentration Factor		
	Groundwater (mg/L)		Soil (mg/kg)		Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
Lead (inorganic)	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-		
Benzo-a-pyrene	1.00E-02	S2	6.60E-01	S2	1.06E+03	1.06E+03	H	-	1.00E+00	TX11	2.06E+00	1.53E+03	26000	LY
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
Phenanthrene	1.00E-02	S2	6.60E-01	S2	4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.38E+00	6.78E+01	2630	LY
Anthracene	3.00E-03	MC	-	-	-	-	-	7.00E-02	3.00E-02	TX11	1.00E+00	-	-	-
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2	6.60E-01	S2	3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	8.74E+04	850	LY
Carbazole	-	-	-	-	-	-	-	-	1.00E+00	TX11	3.73E+00	1.01E+01	170	LY
Dibenzofuran	-	-	-	-	3.50E+01	3.50E+01	H	-	1.00E+00	TX11	5.94E+00	3.89E+01	640	LY

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Anthracene	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Anthracene	0.06666667	0.01	0.15	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11
Carbazole	0.142857143	0.1	0.7	TX11
Dibenzofuran	0.2	0.1	0.5	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values					
	MC	OS	MC	OS	Residential/Plant	Residential/Allotments	Commercial/Industrial	Residential/Plant	Residential/Allotments	Commercial/Industrial
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	0.5	OS	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards											
Constituent	Surface Water Quality Criteria										
	Aquatic Life Protection				Human Health Protection						
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)		
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3	
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3	
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-	
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-	
Anthracene	-	-	-	-	0.014	E	4.3	E	4.3	E	
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E	
Carbazole	-	-	-	-	-	-	-	-	-	-	
Dibenzofuran	-	-	-	-	-	-	-	-	-	-	

Site Name: ACR Montesa
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 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	30	30	30	NA	250	180	-
EFD Exposure frequency for dermal exposure	30	30	30	NA	250	180	-
IRw Ingestion rate of water (L/day)	1	1	2	NA	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0,5	0,5	0,05	0,3	NA	NA	NA
SASwim Skin surface area for swimming (cm²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0,025	0,025	0,025	0,053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg Above-ground vegetable ingestion	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0,01	0,01	0,01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Residential	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m³)		Oral Equivalent Slope Factor 1/(mg/kg-day)		Dermal Equivalent Slope Factor 1/(mg/kg-day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m³)	
Lead (Inorganic)	-	-	-	-	-	-	0,0065	-	-	-	0,00072	-
Benzo-a-pyrene	-	-	-	-	-	-	7,3	EPA1	7,3	D2	0,00088	TX11
Benzo-g,h,i-perylene	0,03	TX11	0,03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0,03	TX11	0,03	D2	-	-	-	-	-	-	-	-
Anthracycline	0,0004	EPA1	0,0004	D2	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0,02	EPA1	0,02	D2	-	-	0,014	EPA1	0,014	D2	-	-
Carbazole	-	-	-	-	-	-	0,02	TX11	0,02	D2	-	-
Dibenzofuran	0,004	TX11	0,004	D2	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes

Completed By: ITM
 Date Completed: 30-nov-yy

Surface Soil Column Parameters		Value	(Units)
h_{cap}	Capillary zone thickness	NA	(m)
h_v	Vadose zone thickness	NA	(m)
ρ_s	Soil bulk density	1,7	(g/cm ³)
f_{oc}	Fraction organic carbon	0,01	(-)
θ_T	Soil total porosity	0,41	(-)
		<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w	Volumetric water content	0,369	(-)
θ_a	Volumetric air content	0,041	(-)
K_{vs}	Vertical hydraulic conductivity	864	(cm/d)
k_v	Vapor permeability	1E-12	(m ²)
L_{gw}	Depth to groundwater	NA	(m)
pH	Soil/groundwater pH	6,8	(-)
W	Length of source-zone area parallel to wind	45	(m)
W_{gw}	Length of source-zone area parallel to GW flow	NA	(m)
L_{ss}	Thickness of affected surface soils	1	(m)
A	Source zone area	2025	(m ²)
L_s	Depth to top of affected soils	0,3	(m)
L_{base}	Depth to base of affected soils	1,3	(m)
L_{subs}	Thickness of affected soils	1	(m)

Outdoor Air Parameters		Value	(Units)
U_{air}	Ambient air velocity in mixing zone	2,25	(m/s)
h_{air}	Air mixing zone height	2	(m)
Q/C	Inverse mean concentration at the center of source	NA	
P_a	Areal particulate emission rate	NA	(g/cm ² /s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_l	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependant on Um/Ut	NA	
PEF	Particulate Emission Factor	NA	

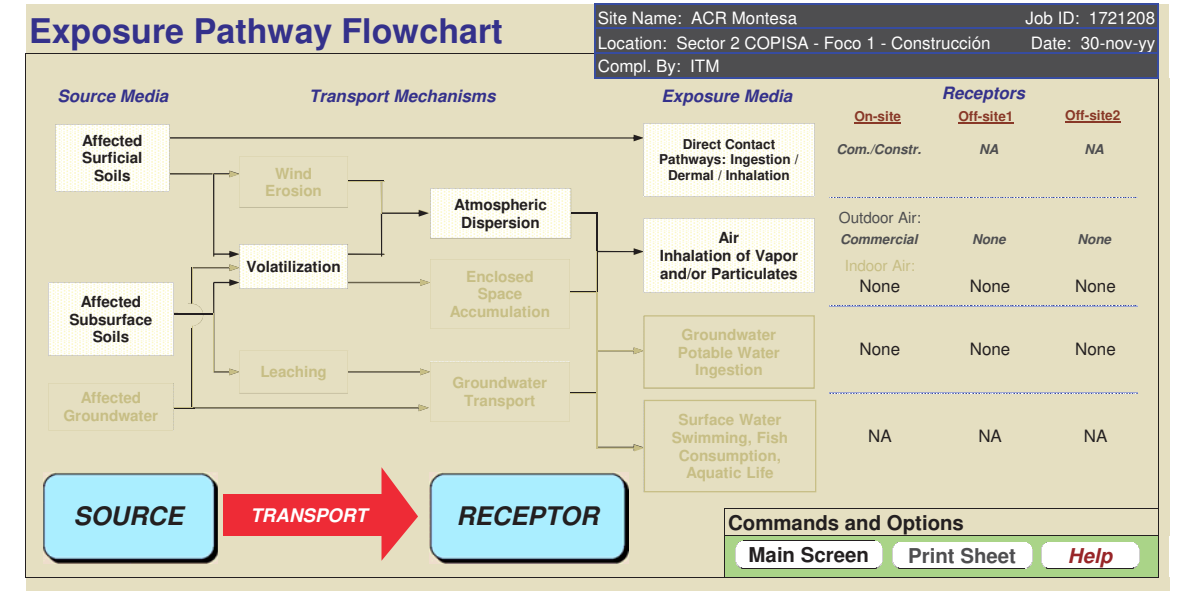
Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	NA	(m)
A_b	Foundation area	NA	NA	(m ²)
X_{crk}	Foundation perimeter	NA	NA	(m)
ER	Building air exchange rate	NA	NA	(1/s)
L_{crk}	Foundation thickness	NA	NA	(m)
Z_{crk}	Depth to bottom of foundation slab	NA	NA	(m)
η	Foundation crack fraction	NA	NA	(-)
dP	Indoor/outdoor differential pressure	NA	NA	(g/cm/s ²)
Q_s	Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	NA	NA	(-)
θ_{acrack}	Volumetric air content of cracks	NA	NA	(-)
BV	Building Volume	NA	NA	(m ³)
W	Building Width Perpendicular to GW flow	NA	NA	(m)
L	Building Length Parallel to GW flow	NA	NA	(m)
V	Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	NA	(m)
I_f	Net groundwater infiltration rate	NA	(cm/yr)
U_{gw}	Groundwater Darcy velocity	NA	(cm/d)
V_{gw}	Groundwater seepage velocity	NA	(cm/d)
K_s	Saturated hydraulic conductivity	NA	(cm/d)
i	Groundwater gradient	NA	(-)
S_w	Width of groundwater source zone	NA	(m)
S_d	Depth of groundwater source zone	NA	(m)
θ_{eff}	Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	Groundwater pH	NA	(-)
	Biodegradation considered?	NA	

Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		<u>Groundwater Ingestion</u>		<u>Groundwater to Indoor Air</u>		
α_x	Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport		<u>Soil to Outdoor Air Inhal.</u>		<u>GW to Outdoor Air Inhal.</u>		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(m ³ /s)
W_{pl}	Width of GW plume at SW discharge	NA	(m)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(m)
DF _{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
 Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data													
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated		Vapor Pressure (@ 20 - 25 C)		Henry's Constant (@ 20 - 25 C)		log (Koc) or log (Kd) (@ 20 - 25 C)	
				(mg/L)	(mg/L)	(mg/kg)	(mm Hg)	(unitless)	(unitless)	(log(L/kg))	(log(L/kg))		
<i>Change - One or more parameter differs from User Chemical Database</i>													
Lead (Inorganic)	7439-92-1	M	207.2	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Phenanthrene	85-01-8	O	178.2334	0.094	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc	TX11
Antimony	7440-36-0	M	121.75	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.65E+00	Kd	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Carbazole	86-74-8	O	167.21016	0.721	TX11	1.77E+01	2.66E-04	TX11	3.38E-03	TX11	3.39E+00	Koc	TX11
Dibenzofuran	132-64-9	O	166.1846	2.860642162	TX11	2.43E+02	1.84E-03	TX11	5.28E-03	TX11	3.93E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
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CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																	
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics													
				Surface Soil Column			Water Bearing Unit			log(Kow) (@ 20 - 25 C)	Diffusion Coefficients						
				Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)		log(L/kg)	Air (cm ² /s)	Water (cm ² /s)				
<i>Change - One or more parameter differs from User Chemical Database</i>																	
Lead (Inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	-	-	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	-	-	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Phenanthrene	85-01-8	O	178.2334	-	-	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Antimony	7440-36-0	M	121.75	-	-	-	-	-	-	-	-	0.00E+00	TX11	0.00E+00	TX11	0.00E+00	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	-	-	-	-	-	-	-	-	8.39E+00	TX11	0.51E-02	TX11	3.66E-06	TX11
Carbazole	86-74-8	O	167.21016	-	-	-	-	-	-	-	-	3.23E+00	TX11	3.90E-02	TX11	7.03E-06	TX11
Dibenzofuran	132-64-9	O	166.1846	-	-	-	-	-	-	-	-	4.00E+00	TX11	5.51E-02	TX11	7.04E-06	TX11

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CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor		
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
<i>Change - One or more parameter differs from User Chemical Database</i>												
Leaf (Inorganic)	-	-	-	-	-	-	1.00E+00	TX11	-	-	-	-
Benzo-a-pyrene	1.00E-02	S2 6.60E-01	S2 1.06E+03	1.06E+03	H	-	1.00E+00	TX11	2.06E+00	1.53E+03	26000	LY
Benzo-g,h,i-perylene	1.00E-02	S2 6.60E-01	S2 1.30E+03	1.30E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
Phenanthrene	1.00E-02	S2 6.60E-01	S2 4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.38E+00	6.78E+01	2630	LY
Anthracy	3.00E-03	MD	-	-	-	7.00E-02	3.00E-02	TX11	1.00E+00	-	-	-
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2 6.60E-01	S2 3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	8.74E+04	850	LY
Carbazole	-	-	-	-	-	-	1.00E+00	TX11	3.73E+00	1.01E+01	170	LY
Dibenzofuran	-	-	3.50E+01	3.50E+01	H	-	1.00E+00	TX11	5.94E+00	3.69E+01	640	LY

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CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
<i>Change - One or more parameter differs from User Chemical Database</i>						
Leaf (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Anthracy	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-

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CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Anthracy	0.06666667	0.01	0.15	TX11
Bis (2-ethyl-hexyl) phthalate	0.529315789	0.1	0.19	TX11
Carbazole	0.142857143	0.1	0.7	TX11
Dibenzofuran	0.2	0.1	0.5	TX11

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CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values			
	MC	OS	Residential/Plant	Residential/Allotments	Commercial/Industrial			
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-
Anthracy	0.006	MC	0.5	OS	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-	-
Carbazole	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-

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CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00496	T3	0.025	T3	0.0189	T3
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-
Anthracy	-	-	-	-	0.014	E	4.3	E	4.3	E
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E
Carbazole	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-	-	-	-

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CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)	
	Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072
Benzo-a-pyrene	-	-	-	-	-	-	7.3	EPA-I	7.3	D2	0.00088	TX11
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Anthracy	0.0004	EPA-I	0.0004	D2	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.02	EPA-I	0.02	D2	-	-	0.014	EPA-I	0.014	D2	-	-
Carbazole	-	-	-	-	-	-	0.02	TX11	0.02	D2	-	-
Dibenzofuran	0.004	TX11	0.004	D2	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
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RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	30	30	30	NA	250	30	-
EFD	30	30	30	NA	250	30	-
IRw	1	1	2	2,5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0,5	0,5	0,05	0,3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0,025	0,025	0,025	0,053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg	0,01	0,01	0,01	NA	NA	NA	NA
VGabg	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary: 0,369 vadose: 0,08 foundation: 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_{ts} Depth to top of affected soils	0	(m)
L_{tbase} Depth to base of affected soils	1,3	(m)
L_{tbase} Thickness of affected soils	1,3	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
Q_{air} Air mixing zone height	2	(m)
Q/C	NA	
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x)	NA	
PEF	6,9E-12	

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_i Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	

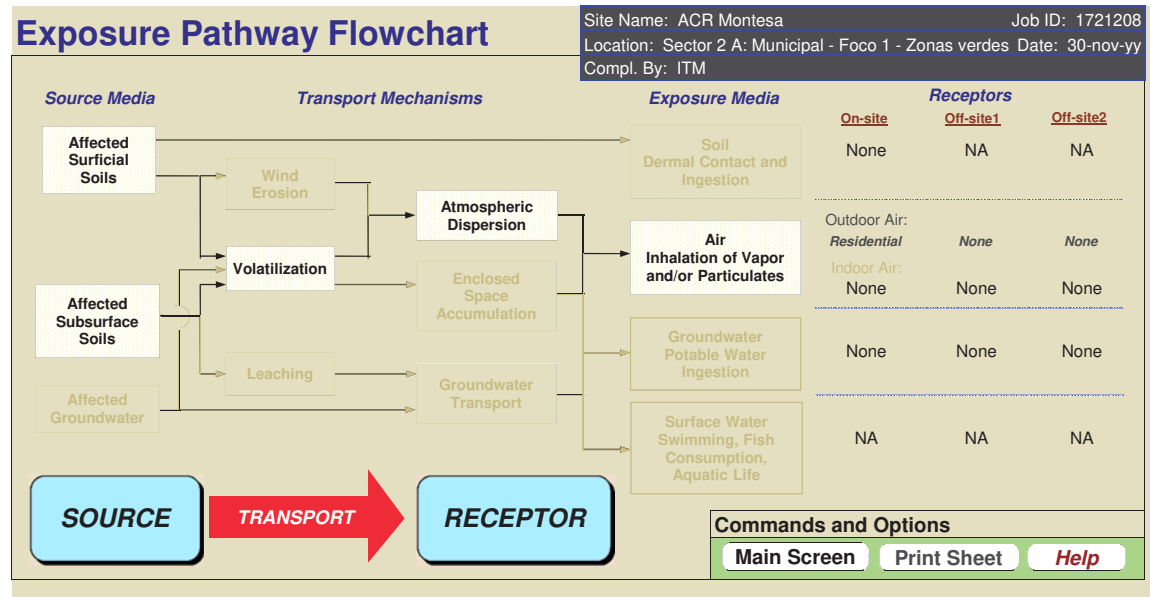
Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

SECTOR 2 - PARQUING MUNICIPAL



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)	Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))				
Lead (inorganic)	7439-92-1	M	207.2	0	1.00E+08	0.00E+00	0.00E+00	1.00E+00	Kd	TX11		
Benzo-a-pyrene	50-32-8	O	252.31528	0.00162	1.55E+01	4.89E-09	4.70E-05	5.98E+00	Koc	TX11		
Dibenzo-a,h-anthracene	53-70-3	O	278.3531494	0.0005	9.53E+00	2.10E-11	4.66E-07	6.28E+00	Koc	TX11		
TPH - Aliph >C21-C34	T-a12134	OT	400	0.000025	1.58E+01	3.34E-07	7.26E+03	8.80E+00	Koc			
TPH - Arom >C21-C35	T-a12134	OT	240	0.0006	8.31E+00	3.34E-07	6.66E-04	5.10E+00	Koc	TPH		
Phenanthrene	85-01-6	O	178.2334	0.994	1.40E+02	6.80E-04	5.40E-03	4.11E+00	Koc	TX11		
Benzo-g,h,i-perylene	191-24-2	O	276.33728	0.00026	4.12E+00	1.00E-10	5.82E-06	6.20E+00	Koc	TX11		
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	0.3	2.04E+03	6.45E-06	4.57E-04	5.83E+00	Koc	TX11		

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air		Water		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)		cm ² /s	cm ² /s	cm ² /s	cm ² /s	cm ² /s
Lead (inorganic)	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Dibenz-a,h-anthracene	-	-	-	-	-	-	6.70E+00	TX11	2.00E-02	TX11	5.18E-06	TX11
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
Phenanthrene	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Benzo-g,h,i-perylene	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdi
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters														
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Conc. Calculated (mg/kg)/(mg/L)	Root Conc. Calculated (mg/kg)/(mg/L)	Bioconcentration Factor		
	Groundwater (mg/L)		Soil (mg/kg)		Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
	Method	Limit	Method	Limit	Method	Limit	Method	Limit						
Lead (inorganic)	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-		
Benzo-a-pyrene	1.00E-02	S2	6.60E-01	S2	1.06E+03	1.06E+03	H	-	1.00E+00	TX11	2.05E+00	1.53E+03	26000	LY
Dibenz-a,h-anthracene	1.00E-02	S2	6.60E-01	S2	1.88E+03	1.88E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	890000	LY
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	10000	LY
Phenanthrene	1.00E-02	S2	6.60E-01	S2	4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.98E+00	6.78E+01	2630	LY
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2	6.60E-01	S2	3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	8.74E+04	850	LY

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdi
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Dibenz-a,h-anthracene	2.7	4.4	21	690	27.11323974	D
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdi
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.066666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Dibenz-a,h-anthracene	0.146067416	0.13	0.89	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdi
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards									
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values				
	MC	OS	OS	OS	Residential/Plant	Residential/Plant	Allotments	Commercial/Industrial	
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-	-	-
Dibenz-a,h-anthracene	-	-	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdi
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards											
Constituent	Surface Water Quality Criteria										
	Aquatic Life Protection				Human Health Protection				Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)		
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3	
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3	
Dibenz-a,h-anthracene	-	-	-	-	0.0000028	E	0.00031	E	0.000031	E	
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-	
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-	
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-	
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-	
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E	

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdi
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	30	30	30	NA	250	180	-
EFD Exposure frequency for dermal exposure	30	30	30	NA	250	180	-
IRw Ingestion rate of water (L/day)	1	1	2	NA	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0,5	0,5	0,05	0,3	NA	NA	NA
SASwim Skin surface area for swimming (cm²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0,025	0,025	0,025	0,053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg Above-ground vegetable ingestion	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0,01	0,01	0,01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Residential	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m³)		Oral Equivalent Slope Factor 1/(mg/kg/day)		Dermal Equivalent Slope Factor 1/(mg/kg/day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m³)	
	Lead (inorganic)	-	-	-	-	-	-	0,0005	-	-	-	0,00012
Benzo-a-pyrene	-	-	-	-	-	-	7,3	EPA1	7,3	D2	0,00088	TX11
Dibenz-a,h-anthracene	-	-	-	-	-	-	7,3	TX11	7,3	D2	0,00088	TX11
TPH - Aliph >C21-C34	1,6	TX11	1,6	D2	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	0,03	TPH	0,03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0,03	TX11	0,03	D2	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	0,03	TX11	0,03	D2	-	-	-	-	-	-	-	-
Bis (2-ethylhexyl) phthalate	0,02	EPA1	0,02	D2	-	-	0,014	EPA1	0,014	D2	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdi
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes Date Completed: 30-nov-yy

Surface Soil Column Parameters		Value	(Units)
h_{cap}	Capillary zone thickness	NA	(m)
h_v	Vadose zone thickness	NA	(m)
ρ_s	Soil bulk density	1.7	(g/cm ³)
f_{oc}	Fraction organic carbon	0.01	(-)
θ_T	Soil total porosity	0.41	(-)
		<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w	Volumetric water content	0.369	(-)
θ_a	Volumetric air content	0.041	(-)
K_{vs}	Vertical hydraulic conductivity	864	(cm/d)
k_v	Vapor permeability	1E-12	(m ²)
L_{gw}	Depth to groundwater	NA	(m)
pH	Soil/groundwater pH	6.8	(-)
W	Length of source-zone area parallel to wind	45	(m)
W_{gw}	Length of source-zone area parallel to GW flow	NA	(m)
L_{ss}	Thickness of affected surface soils	1	(m)
A	Source zone area	2025	(m ²)
L_s	Depth to top of affected soils	0.3	(m)
L_{base}	Depth to base of affected soils	1.3	(m)
L_{subs}	Thickness of affected soils	1	(m)

Outdoor Air Parameters		Value	(Units)
U_{air}	Ambient air velocity in mixing zone	2.25	(m/s)
h_{air}	Air mixing zone height	2	(m)
Q/C	Inverse mean concentration at the center of source	NA	
P_a	Areal particulate emission rate	NA	(g/cm ² /s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_l	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependent on Um/Ut	NA	
PEF	Particulate Emission Factor	NA	

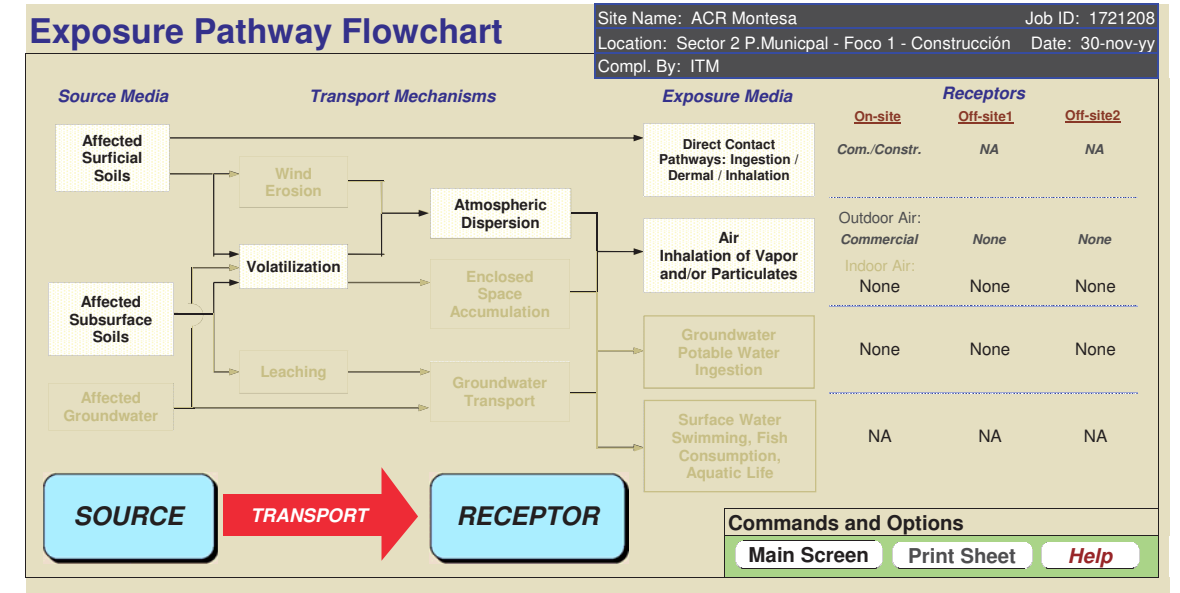
Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	NA	(m)
A_b	Foundation area	NA	NA	(m ²)
X_{crk}	Foundation perimeter	NA	NA	(m)
ER	Building air exchange rate	NA	NA	(1/s)
L_{crk}	Foundation thickness	NA	NA	(m)
Z_{crk}	Depth to bottom of foundation slab	NA	NA	(m)
η	Foundation crack fraction	NA	NA	(-)
dP	Indoor/outdoor differential pressure	NA	NA	(g/cm ² /s ²)
Q_s	Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	NA	NA	(-)
θ_{acrack}	Volumetric air content of cracks	NA	NA	(-)
BV	Building Volume	NA	NA	(m ³)
W	Building Width Perpendicular to GW flow	NA	NA	(m)
L	Building Length Parallel to GW flow	NA	NA	(m)
V	Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	NA	(m)
I_r	Net groundwater infiltration rate	NA	(cm/yr)
U_{gw}	Groundwater Darcy velocity	NA	(cm/d)
V_{gw}	Groundwater seepage velocity	NA	(cm/d)
K_s	Saturated hydraulic conductivity	NA	(cm/d)
i	Groundwater gradient	NA	(-)
S_w	Width of groundwater source zone	NA	(m)
S_d	Depth of groundwater source zone	NA	(m)
θ_{eff}	Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	Groundwater pH	NA	(-)
	Biodegradation considered?	NA	

Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		<u>Groundwater Ingestion</u>		<u>Groundwater to Indoor Air</u>		
α_x	Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport		<u>Soil to Outdoor Air Inhal.</u>		<u>GW to Outdoor Air Inhal.</u>		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(m ³ /s)
W_{pl}	Width of GW plume at SW discharge	NA	(m)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(m)
DF _{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
 Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data													
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)		Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) log(L/kg)	
Lead (Inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd TX11
Benzo-a-pyrene	50-32-8	O	252.31528	TX11	0.00162	TX11	1.55E+01	4.89E-09	TX11	4.70E-05	TX11	5.98E+00	Koc TX11
Dibenz-a,h-anthracene	53-70-3	O	278.3531494	TX11	0.0005	TX11	9.53E+00	2.10E-11	TX11	4.66E-07	TX11	6.28E+00	Koc TX11
TPH - Aliph >C21-C34	T-a2134	OT	400	-	0.0000025	-	1.58E+01	3.34E-07	-	7.26E-03	-	8.80E+00	Koc -
TPH - Arom >C21-C35	T-a2134	OT	340	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc TPH
Phenanthrene	85-01-8	O	178.2334	TX11	0.394	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.15E+00	Koc TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc TX11

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																		
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics														
				Surface Soil Column					Water Bearing Unit					log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients			
				Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)		log(L/kg)	Air (cm ² /s)	Water (cm ² /s)					
Lead (Inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Benzo-a-pyrene	50-32-8	O	252.31528	-	-	-	-	-	-	-	-	-	6.11E+00	TX11	4.30E-02	TX11	9.00E-06	TX11
Dibenz-a,h-anthracene	53-70-3	O	278.3531494	-	-	-	-	-	-	-	-	-	6.70E+00	TX11	2.00E-02	TX11	5.18E-06	TX11
TPH - Aliph >C21-C34	T-a2134	OT	400	-	-	-	-	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-
TPH - Arom >C21-C35	T-a2134	OT	340	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	-	-	1.00E-01	TPH	1.00E-05	TPH
Phenanthrene	85-01-8	O	178.2334	-	-	-	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11
Benzo-g,h,i-perylene	191-24-2	O	276.33728	-	-	-	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	-	-	-	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor		
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
<i>Change - One or more parameter differs from User Chemical Database</i>												
Leaf (Inorganic)	-	-	-	-	-	-	1.00E+00	TX11	-	-	-	-
Benzo-a-pyrene	1.00E-02	S2 6.60E-01	S2 1.06E+03	1.06E+03	H	-	1.00E+00	TX11	2.06E+00	1.53E+03	26000	LY
Dibenz-a,h-anthracene	1.00E-02	S2 6.60E-01	S2 1.88E+03	1.88E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
TPH - Aliph >C21-C34	-	-	-	-	-	-	1.00E+00	TX11	-	-	890000	LY
TPH - Arom >C21-C35	-	-	-	-	-	-	1.00E+00	TX11	-	-	10000	LY
Phenanthrene	1.00E-02	S2 6.60E-01	S2 4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.38E+00	6.78E+01	2630	LY
Benzo-g,h,i-perylene	1.00E-02	S2 6.60E-01	S2 1.30E+03	1.30E+03	H	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2 6.60E-01	S2 3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	8.74E+04	850	LY

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
<i>Change - One or more parameter differs from User Chemical Database</i>						
Leaf (Inorganic)	-	-	-	-	-	-
Benzo-a-pyrene	1.2	2.9	14	130	9.782988812	D
Dibenz-a,h-anthracene	2.7	4.4	21	690	27.11323974	D
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Benzo-a-pyrene	0.146067416	0.13	0.89	TX11
Dibenz-a,h-anthracene	0.146067416	0.13	0.89	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values				
			Residential/PI ant	Residential/W o Plant	Allotments	Commercial/In d.	
Lead (Inorganic)	0.015	MC	50	OS	-	-	-
Benzo-a-pyrene	0.0002	MC	0.2	OS	-	-	-
Dibenz-a,h-anthracene	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00496	T3	0.025	T3	0.0189	T3
Benzo-a-pyrene	-	-	-	-	0.000099	T3	0.00081	T3	0.00054	T3
Dibenz-a,h-anthracene	-	-	-	-	0.0000028	E	0.00031	E	0.000031	E
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Toxicity Parameters											
	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)	
Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072	-
Benzo-a-pyrene	-	-	-	-	-	-	7.3	EPA-I	7.3	D2	0.00088	TX11
Dibenz-a,h-anthracene	-	-	-	-	-	-	7.3	TX11	7.3	D2	0.00088	TX11
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.02	EPA-I	0.02	D2	-	-	0.014	EPA-I	0.014	D2	-	-

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	30	30	30	NA	250	30	-
EFD	30	30	30	NA	250	30	-
IRw	1	1	2	2,5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0,5	0,5	0,05	0,3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0,025	0,025	0,025	0,053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg	0,01	0,01	0,01	NA	NA	NA	NA
VGabg	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary: 0,369 vadose: 0,08 foundation: 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1,3	(m)
L_{sub} Thickness of affected soils	1,3	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
Q_{air} Air mixing zone height	2	(m)
Q/C	NA	
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x)	NA	
PEF	6,9E-12	

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_f Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	

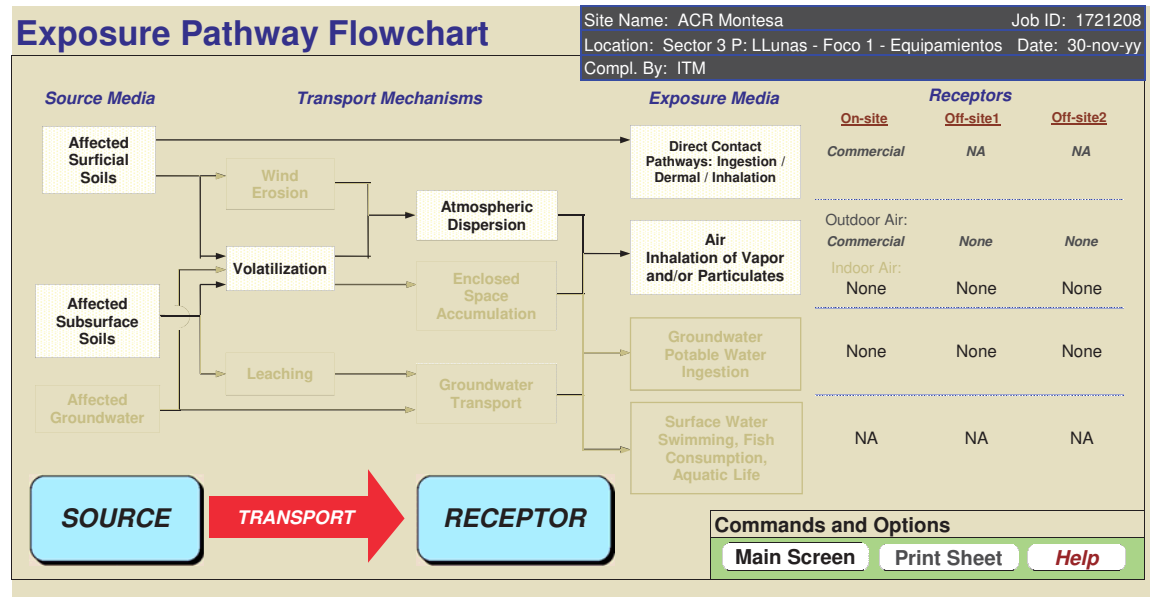
Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

SECTOR 3 - PARQUING LLUNAS



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))					
				TX11	TX11				TX11	TX11				
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+08	0.00E+00	TX11	1.00E+00	Kd	TX11		
TPH - Aliph >C21-C24	T-al2134	OT	400	-	0.0000025	-	1.58E+01	3.34E-07	-	7.26E+03	-	6.80E+00	Koc	-
TPH - Arom >C21-C25	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Benzo-g,h,-perylene	191-24-2	O	276.33728	TX11	0.00026	TX11	4.12E-00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Permethrin	52645-53-1	O	391.3	-	0.006	-	error LDF	2.18E-08	-	1.87E-06	-	1.19E+05	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)		Water (cm ² /s)		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
Lead (inorganic)	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
Benzo-g,h,i-perylene	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Permethrin	-	-	-	-	-	-	6.50E+00	-	1.94E-02	-	4.78E-06	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
Lead (inorganic)	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	1.00E+00	TX11	-	890000	LY
TPH - Arom >C21-C35	-	-	-	-	-	-	-	1.00E+00	TX11	-	10000	LY
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	1.00E+00	TX11	8.05E-01	4.33E+03	72000
Permethrin	-	-	-	-	-	-	-	1.00E+00	-	1.14E+00	3.06E+03	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Permethrin	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Permethrin	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards							
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values			
	MC	OS		Residential/Plant	Residential/Allotments	Commercial/Industrial	
Lead (Inorganic)	0.015	MC	50	OS			
TPH - Aliph >C21-C34	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-
Permethrin	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Permethrin	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters										
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1/(mg/kg/day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m ³)	
	Lead (Inorganic)	-	-	-	-	-	-	0.0005	-	0.00012
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-
Permethrin	0.05	EPA1	0.05	-	-	-	0.009567	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	30	30	30	NA	6	180	-
EFD Exposure frequency for dermal exposure	30	30	30	NA	6	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.176	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.076	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Commercial	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Completed By: ITM Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1.7	(g/cm ³)
f_{oc} Fraction organic carbon	0.01	(-)
θ_T Soil total porosity	0.41	(-)
	<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w Volumetric water content	0.369	(-)
θ_a Volumetric air content	0.041	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
k_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH Soil/groundwater pH	6.8	(-)
W Length of source-zone area parallel to wind	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A Source zone area	2025	(m ²)
L_s Depth to top of affected soils	0.3	(m)
L_{base} Depth to base of affected soils	1.3	(m)
L_{subs} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2.25	(m/s)
h_{air} Air mixing zone height	2	(m)
Q/C Inverse mean concentration at the center of source	NA	
P_a Areal particulate emission rate	6.9E-14	(g/cm ² /s)
V Fraction of vegetative cover	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x) Windspeed function dependent on Um/Ut	NA	
PEF Particulate Emission Factor	6.9E-12	

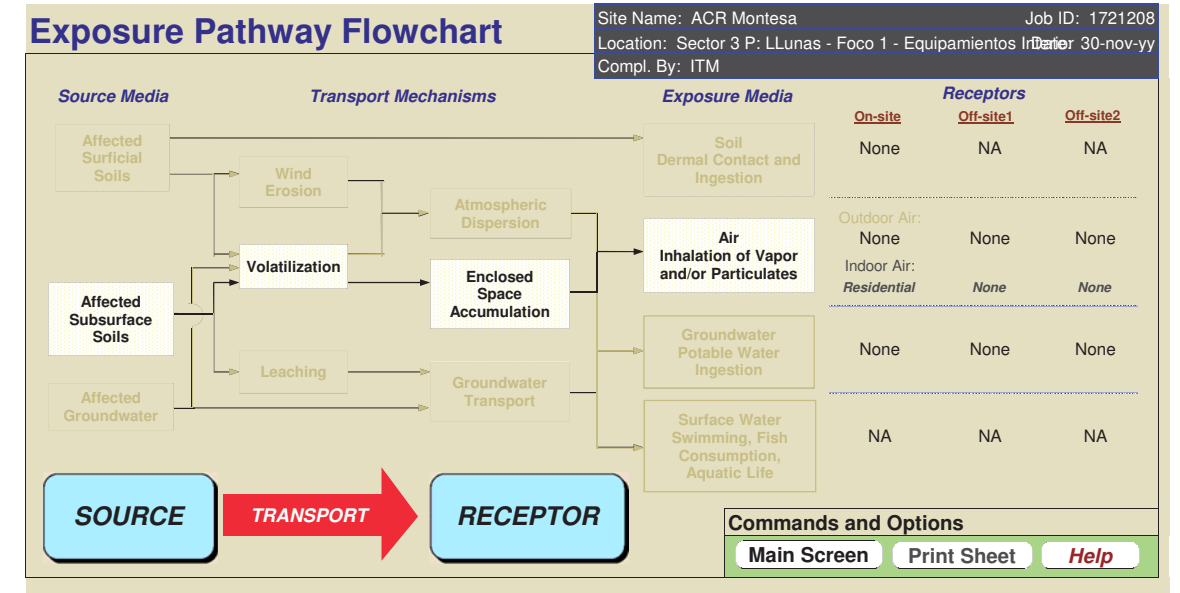
Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER Building air exchange rate	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP Indoor/outdoor differential pressure	NA	NA	(g/cm/s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV Building Volume	NA	NA	(m ³)
W Building Width Perpendicular to GW flow	NA	NA	(m)
L Building Length Parallel to GW flow	NA	NA	(m)
V Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters	Value	(Units)
δ_{gw} Groundwater mixing zone depth	NA	(m)
I_f Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i Groundwater gradient	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat} Groundwater pH	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{pl} Width of GW plume at SW discharge	NA	(m)
δ_{pl} Thickness of GW plume at SW discharge	NA	(m)
DF _{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs												
Physical Property Data												
Change - One or more parameter differs from User Chemical Database												
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)	Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C) log(L/kg)				
Lead (Inorganic)	7439-92-1	M	207.2	0	TX11 1.00E+06	0.00E+00	TX11 0.00E+00	TX11 1.00E+00	Kd	TX11		
TPH - Aliph >C21-C34	T-ar2134	OT	400	0.0000025	1.58E+01	3.34E-07	7.26E+03	8.80E+00	Koc			
TPH - Arom >C21-C35	T-ar2134	OT	240	0.0066	8.31E+00	3.34E-07	6.60E-04	5.10E+00	Koc	TPH		
Benzo-g,h,i-perylene	191-24-2	O	276.33728	0.00026	TX11 4.12E+00	1.00E-10	TX11 5.82E-06	TX11 6.20E+00	Koc	TX11		
Permethrin	52645-53-1	O	391.3	0.006	error LDF	2.18E-08	1.87E-06	1.19E+05				

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs																
Physical Property Data																
Change - One or more parameter differs from User Chemical Database																
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)	Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	pH specific Kd for non-organics			log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
								Surface Soil Column	Water Bearing Unit			Air (cm ² /s)	Water (cm ² /s)			
								Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)			
Lead (Inorganic)	7439-92-1	M	207.2	0	TX11 1.00E+06	0.00E+00	TX11 0.00E+00							7.29E-01	TX11 0.00E+00	TX11 0.00E+00
TPH - Aliph >C21-C34	T-ar2134	OT	400	0.0000025	1.58E+01	3.34E-07	7.26E+03								1.00E-01	1.00E-05
TPH - Arom >C21-C35	T-ar2134	OT	240	0.0066	8.31E+00	3.34E-07	6.60E-04								1.00E-01	1.00E-05
Benzo-g,h,i-perylene	191-24-2	O	276.33728	0.00026	TX11 4.12E+00	1.00E-10	TX11 5.82E-06							6.70E+00	TX11 4.90E-02	TX11 5.65E-05
Permethrin	52645-53-1	O	391.3	0.006	error LDF	2.18E-08	1.87E-06							6.50E+00	1.94E-02	4.78E-06

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters																
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor						
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)										
<i>Change - One or more parameter differs from User Chemical Database</i>																
Leaf (Inorganic)	-	-	-	-	-	-	-	-	-	-	-	-	-			
TPH - Aliph >C21-C34	-	-	-	-	-	-	1.00E+00	TX11	-	-	890000	LY	-			
TPH - Arom >C21-C35	-	-	-	-	-	-	1.00E+00	TX11	-	-	10000	LY	-			
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	-	-	-	1.00E+00	TX11	8.06E-01	4.33E+03	72000	LY
Permethrin	-	-	-	-	-	-	-	-	1.00E+00	-	1.14E+00	3.06E+03	-	-		

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
<i>Change - One or more parameter differs from User Chemical Database</i>						
Leaf (Inorganic)	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Permethrin	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Permethrin	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values			
	MC	OS	Residential/Industrial	Residential/Commercial	Allotments	Commercial/Industrial		
			mg/kg	mg/kg	mg/kg	mg/kg		
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-
Permethrin	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00499	T3	0.025	T3	0.0189	T3
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Permethrin	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters													
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)		
	Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072	-
	TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-	
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-	
Permethrin	0.05	EPA-1	0.05	-	-	-	0.009567	-	-	-	-	-	

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamiento
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	125	125	125	NA	6	180	-
EFD	125	125	125	NA	6	180	-
IRw	1	1	2	2.5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim	3500	8100	23000	15680	NA	NA	NA
IRfish	0.025	0.025	0.025	0.053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0.002	0.002	0.006	0.733	NA	NA	NA
IRabg	0.001	0.001	0.002	0.317	NA	NA	NA
VGbg	0.01	0.01	0.01	NA	NA	NA	NA
VGabg	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	None	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	Residential	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	NA	NA	NA	(m)
Indoor air inhalation receptor	0	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	NA
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h _{cap} Capillary zone thickness	NA	(m)
h _v Vadose zone thickness	NA	(m)
ρ _s Soil bulk density	1,7	(g/cm ³)
f _{oc} Fraction organic carbon	0,01	(-)
θ _t Soil total porosity	0,41	(-)
θ _v Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ _a Volumetric air content	0,041 0,33 0,26	(-)
K _{vs} Vertical hydraulic conductivity	864	(cm/d)
K _v Vapor permeability	1E-12	(m ²)
L _{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	Length of source-zone area parallel to wind	(m)
W _{gw}	Length of source-zone area parallel to GW flow	(m)
L _{ss}	Thickness of affected surface soils	(m)
A	Source zone area	(m ²)
L _{ts}	Depth to top of affected soils	(m)
L _{base}	Depth to base of affected soils	(m)
L _{sub}	Thickness of affected soils	(m)

Outdoor Air Parameters	Value	(Units)
U _{air} Ambient air velocity in mixing zone	NA	(m/s)
Q _{air} Air mixing zone height	NA	(m)
Q/C	Inverse mean concentration at the center of source	NA
P _a	Areal particulate emission rate	(g/cm ² /s)
V	Fraction of vegetative cover	NA
U _m	Mean annual airvelocity at 7m	NA
U _t	Equivalent 7m air velocity threshold value	NA
F(x)	Windspeed function dependant on Um/Ut	NA
PEF	Particulate Emission Factor	NA

Building Parameters	Residential	Commercial	(Units)
L _b	2	NA	(m)
A _b	70	NA	(m ²)
X _{crk}	49	NA	(m)
ER	0,00014	NA	(1/s)
L _{crk}	0,15	NA	(m)
Z _{crk}	0,15	NA	(m)
η	0,001	NA	(-)
dP	0	NA	(g/cm ² /s ²)
Q _s	0	NA	(m ³ /s)
θ _{wcrack}	0,12	NA	(-)
θ _{crack}	0,26	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

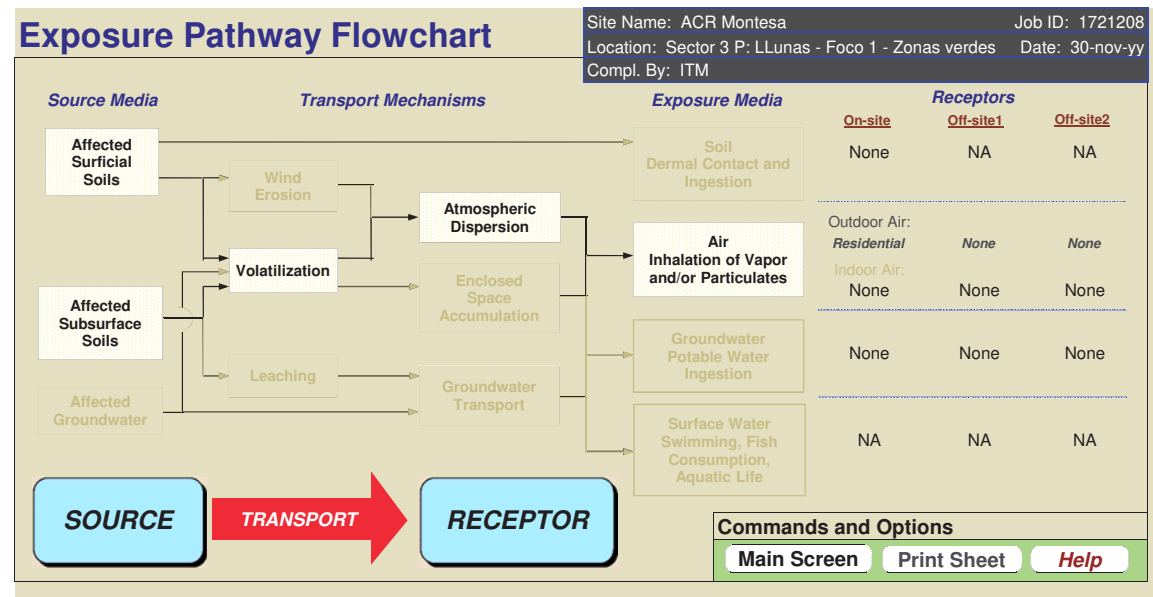
Groundwater Parameters	Value	(Units)
θ _{gw}	Groundwater mixing zone depth	(m)
I _i	Net groundwater infiltration rate	(cm/yr)
U _{gw}	Groundwater Darcy velocity	(cm/d)
V _{gw}	Groundwater seepage velocity	(cm/d)
K _s	Saturated hydraulic conductivity	(cm/d)
i	Groundwater gradient	(-)
S _w	Width of groundwater source zone	(m)
S _d	Depth of groundwater source zone	(m)
θ _{eff}	Effective porosity in water-bearing unit	(-)
f _{oc-sat}	Fraction organic carbon in water-bearing unit	(-)
pH _{sat}	Groundwater pH	(-)
	Biodegradation considered?	NA

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α _x	NA	NA	NA	NA	(m)
α _y	NA	NA	NA	NA	(m)
α _z	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
α _y	NA	NA	NA	NA	(m)
α _z	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q _{sw}	Surface water flowrate	(m ³ /s)
W _{sw}	Width of GW plume at SW discharge	(m)
δ _{sw}	Thickness of GW plume at SW discharge	(m)
DF _{sw}	Groundwater-to-surface water dilution factor	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))				
				TX11	TX11				TX11	TX11			
Lead (inorganic)	7439-92-1	M	207.2	0	TX11	1.00E+08	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
TPH - Aliph >C21-C24	T-al2134	OT	400	0.0000025	-	1.58E+01	3.34E-07	-	7.26E+03	-	6.80E+00	Koc	-
TPH - Arom >C21-C25	T-ar2134	OT	240	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Benzo-g,h,-perylene	191-24-2	O	276.33728	0.00026	TX11	4.12E-00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc	TX11
Permethrin	52645-53-1	O	391.3	-	0.006	-	error LDF	2.18E-08	-	1.87E-06	-	1.19E+05	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)		Water (cm ² /s)		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
Lead (inorganic)	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
Benzo-g,h,i-perylene	-	-	-	-	-	-	6.70E+00	TX11	4.90E-02	TX11	5.65E-05	TX11
Permethrin	-	-	-	-	-	-	6.50E+00	-	1.94E-02	-	4.78E-06	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Factor Calculated (mg/kg)/(mg/L)	Root Concn. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
Lead (inorganic)	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	890000 LY
TPH - Arom >C21-C35	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	10000 LY
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	1.00E+00	TX11	8.05E-01	4.33E+03	72000 LY
Permethrin	-	-	-	-	-	-	-	1.00E+00	-	1.14E+00	3.06E+03	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Permethrin	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Permethrin	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards							
Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values		
	MC	OS	Residential	Industrial	Allotments	Commercial/Industrial	Other
Lead (Inorganic)	0.015	MC	50	OS	mg/kg	mg/kg	mg/kg
TPH - Aliph >C21-C34	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-
Permethrin	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Permethrin	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters										
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1/(mg/kg/day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m ³)	
	Value	TX11	Value	D2	Value	D2	Value	D2	Value	D2
Lead (Inorganic)	-	-	-	-	0.0005	-	-	-	0.00012	-
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-
Permethrin	0.05	EPA1	0.05	-	-	-	0.009567	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	30	30	30	NA	250	180	-
EFD Exposure frequency for dermal exposure	30	30	30	NA	250	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.176	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.076	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Residential	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Completed By: ITM Date Completed: 30-nov-yy

Surface Soil Column Parameters		Value	(Units)
h_{cap}	Capillary zone thickness	NA	(m)
h_v	Vadose zone thickness	NA	(m)
ρ_s	Soil bulk density	1,7	(g/cm ³)
f_{oc}	Fraction organic carbon	0,01	(-)
θ_T	Soil total porosity	0,41	(-)
		<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w	Volumetric water content	0,369	(-)
θ_a	Volumetric air content	0,041	(-)
K_{vs}	Vertical hydraulic conductivity	864	(cm/d)
k_v	Vapor permeability	1E-12	(m ²)
L_{gw}	Depth to groundwater	NA	(m)
pH	Soil/groundwater pH	6,8	(-)
W	Length of source-zone area parallel to wind	45	(m)
W_{gw}	Length of source-zone area parallel to GW flow	NA	(m)
L_{ss}	Thickness of affected surface soils	1	(m)
A	Source zone area	2025	(m ²)
L_s	Depth to top of affected soils	0,3	(m)
L_{base}	Depth to base of affected soils	1,3	(m)
L_{subs}	Thickness of affected soils	1	(m)

Outdoor Air Parameters		Value	(Units)
U_{air}	Ambient air velocity in mixing zone	2,25	(m/s)
h_{air}	Air mixing zone height	2	(m)
Q/C	Inverse mean concentration at the center of source	NA	
P_a	Areal particulate emission rate	NA	(g/cm ² /s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_l	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependent on Um/Ut	NA	
PEF	Particulate Emission Factor	NA	

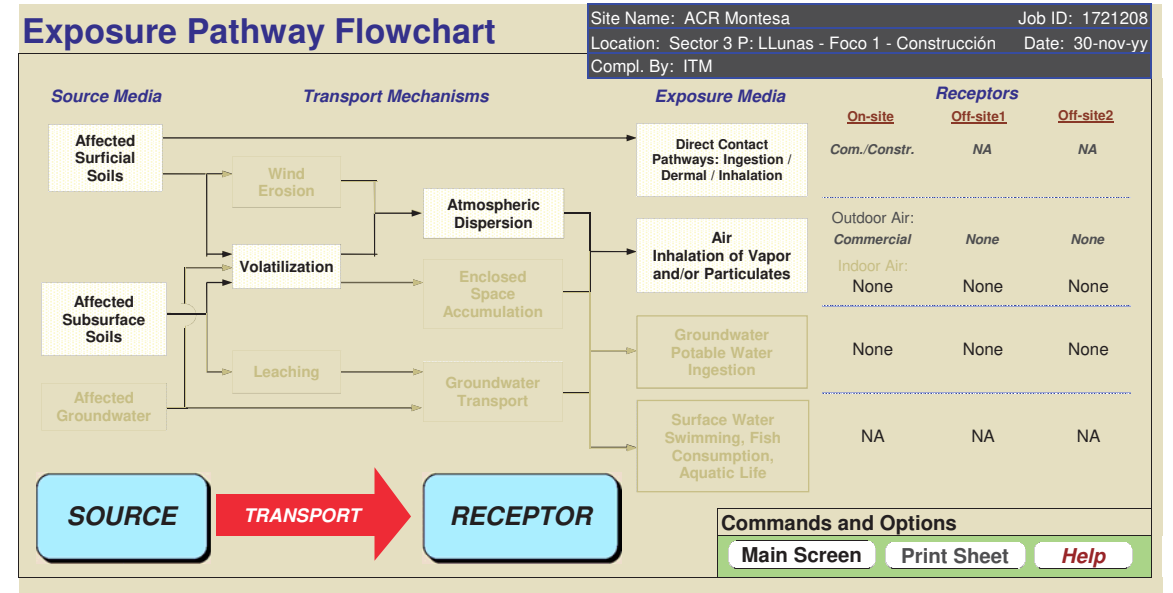
Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	NA	(m)
A_b	Foundation area	NA	NA	(m ²)
X_{crk}	Foundation perimeter	NA	NA	(m)
ER	Building air exchange rate	NA	NA	(1/s)
L_{crk}	Foundation thickness	NA	NA	(m)
Z_{crk}	Depth to bottom of foundation slab	NA	NA	(m)
η	Foundation crack fraction	NA	NA	(-)
dP	Indoor/outdoor differential pressure	NA	NA	(g/cm ² /s ²)
Q_s	Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	NA	NA	(-)
θ_{acrack}	Volumetric air content of cracks	NA	NA	(-)
BV	Building Volume	NA	NA	(m ³)
W	Building Width Perpendicular to GW flow	NA	NA	(m)
L	Building Length Parallel to GW flow	NA	NA	(m)
V	Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	NA	(m)
I_f	Net groundwater infiltration rate	NA	(cm/yr)
U_{gw}	Groundwater Darcy velocity	NA	(cm/d)
V_{gw}	Groundwater seepage velocity	NA	(cm/d)
K_s	Saturated hydraulic conductivity	NA	(cm/d)
i	Groundwater gradient	NA	(-)
S_w	Width of groundwater source zone	NA	(m)
S_d	Depth of groundwater source zone	NA	(m)
θ_{eff}	Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	Groundwater pH	NA	(-)
	Biodegradation considered?	NA	

Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		<u>Groundwater Ingestion</u>		<u>Groundwater to Indoor Air</u>		
α_x	Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport		<u>Soil to Outdoor Air Inhal.</u>		<u>GW to Outdoor Air Inhal.</u>		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(m ³ /s)
W_{pl}	Width of GW plume at SW discharge	NA	(m)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(m)
DF _{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) log(L/kg)	
				TX11	TX11	TX11	TX11	TX11	TX11	Kd	TX11	
<i>Change - One or more parameter differs from User Chemical Database</i>												
Lead (Inorganic)	7439-92-1	M	207.2	-	0	TX11 1.00E+06	0.00E+00	TX11 0.00E+00	TX11 1.00E+00	Kd	TX11	
TPH - Aliph >C21-C34	T-ar2134	OT	400	-	0.0000025	1.58E+01	3.34E-07	-	7.26E+03	-	8.80E+00	Koc -
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc TPH
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	Koc TX11
Permethrin	52645-53-1	O	391.3	-	0.006	-	error LDF	2.18E-08	-	1.87E-06	-	1.19E+05 -

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics												
				Surface Soil Column		Water Bearing Unit		log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients							
				Slope	y-Intercept	Slope	y-Intercept		Air (cm ² /s)	Water (cm ² /s)						
<i>Change - One or more parameter differs from User Chemical Database</i>																
Lead (Inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	7.29E-01	TX11 0.00E+00	TX11 0.00E+00	TX11 -	
TPH - Aliph >C21-C34	T-ar2134	OT	400	-	-	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05 -	
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	-	1.00E-01	TPH 1.00E-05	TPH	
Benzo-g,h,i-perylene	191-24-2	O	276.33728	TX11	0.00026	4.12E+00	1.00E-10	TX11	5.82E-06	TX11	6.20E+00	-	6.70E-02	TX11 4.90E-02	TX11 5.65E-05	TX11
Permethrin	52645-53-1	O	391.3	-	0.006	-	error LDF	2.18E-08	-	1.87E-06	-	-	6.50E+00	-	1.94E-02 -	4.78E-06 -

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters													
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor			
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)							
<i>Change - One or more parameter differs from User Chemical Database</i>													
Leaf (Inorganic)	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	1.00E+00	TX11	-	-	890000	LY	-
TPH - Arom >C21-C35	-	-	-	-	-	-	1.00E+00	TX11	-	-	10000	LY	-
Benzo-g,h,i-perylene	1.00E-02	S2	6.60E-01	S2	1.30E+03	1.30E+03	H	-	8.06E-01	4.33E+03	72000	LY	-
Permethrin	-	-	-	-	-	-	1.00E+00	-	1.14E+00	3.06E+03	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
<i>Change - One or more parameter differs from User Chemical Database</i>						
Leaf (Inorganic)	-	-	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Benzo-g,h,i-perylene	1.2	2.9	14	130	9.782988812	D
Permethrin	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Benzo-g,h,i-perylene	0.146067416	0.13	0.89	TX11
Permethrin	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		UK Soil Guideline Values			
	MC	OS	Residential/Industrial	Residential/Commercial	Allotments	Commercial/Industrial		
Lead (Inorganic)	0.015	MC	50	OS	mg/kg	mg/kg	mg/kg	mg/kg
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-
Permethrin	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00499	T3	0.025	T3	0.0189	T3
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Benzo-g,h,i-perylene	-	-	-	-	-	-	-	-	-	-
Permethrin	-	-	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters													
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)		
	Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072	-
	TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-	
Benzo-g,h,i-perylene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-	
Permethrin	0.05	EPA-1	0.05	-	-	-	0.009567	-	-	-	-	-	

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	365	365	365	NA	250	20	-
EFD	365	365	365	NA	250	20	-
IRw	1	1	2	2.5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim	3500	8100	23000	15680	NA	NA	NA
IRfish	0.025	0.025	0.025	0.053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0.002	0.002	0.006	2.141	NA	NA	NA
IRabg	0.001	0.001	0.002	0.925	NA	NA	NA
VGbg	0.01	0.01	0.01	NA	NA	NA	NA
VGabg	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Completed By: ITM
 Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_t Depth to top of affected soils	0,3	(m)
L_{base} Depth to base of affected soils	1,3	(m)
L_{sub} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
Q_{air} Air mixing zone height	2	(m)
Q/C	NA	
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	NA	
U_m Mean annual airvelocity at 7m	NA	
U_t Equivalent 7m air velocity threshold value	NA	
F(x)	NA	
PEF	6,9E-12	

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_f Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	

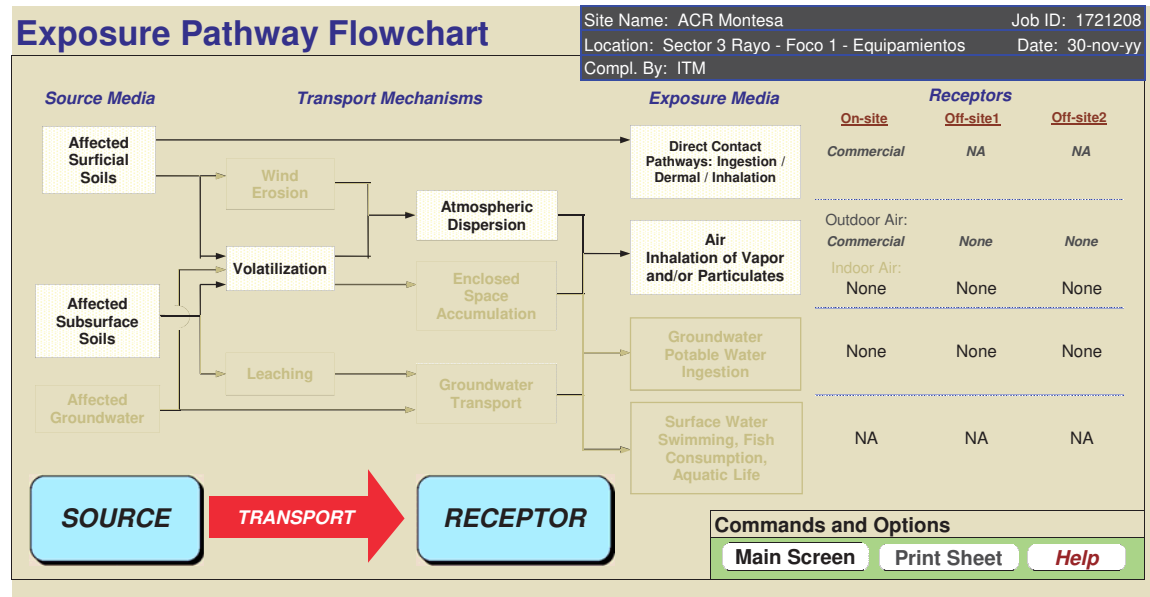
Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

SECTOR 3 - PARQUING RAYO



CHEMICAL DATA FOR SELECTED COCs

Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C)					
				(mg/L)	(TX11)				(Kd)	(TX11)				
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+08	0.00E+00	TX11	0.00E+00	TX11	Kd	TX11	
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.89E+00	Koc	TX11
Copper	7440-50-8	M	63.546	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.60E+00	Kd	TX11
TPH - Aliph >C21-C34	T-al2134	OT	400	-	0.0000025	-	1.58E-01	3.34E-07	-	7.26E+03	-	8.80E+00	Koc	-
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Phenanthrene	85-01-6	O	178.2334	TX11	0.994	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.16E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)		Water (cm ² /s)		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
Lead (inorganic)	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11
Copper	-	-	-	-	-	-	5.71E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
TPH - Aliph >C21-C34	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-	1.00E-05	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
Phenanthrene	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Conc. Factor Calculated (mg/kg)/(mg/L)	Root Conc. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor
	Groundwater (mg/L)		Soil (mg/kg)		Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)				
Lead (inorganic)	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2	6.60E-01	S2	3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	8.74E+04
Copper	6.00E-02	S	6.00E-03	S	-	-	-	2.90E-01	2.50E-01	TX11	1.00E+00	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	890000
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	10000
Phenanthrene	1.00E-02	S2	6.60E-01	S2	4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.38E+00	6.78E+01

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Copper	0.001	-	-	-	-	D
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	0.23	1.1	5.6	2.9	1,154823174	D

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11
Copper	0.01754386	0.01	0.57	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.69	TX11
Phenanthrene	0.146067416	0.13	0.69	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards							
Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values				
			Residential/Plant	Residential/Allotments	Commercial/Industrial		
Lead (Inorganic)	0.015	MC	50	OS	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-
Copper	1.3	MC	1	OS	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection					
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E
Copper	-	-	0.0036	T1	1.3	E	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1/(mg/kg/day)		Dermal Equivalent Slope Factor 1/(mg/kg/day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m ³)	
	Value	Reference	Value	Reference	Value	Reference	Value	Reference	Value	Reference	Value	Reference
Lead (Inorganic)	-	-	-	-	-	-	0.0005	-	-	-	0.00012	-
Bis (2-ethylhexyl) phthalate	0.02	EPA1	0.02	D2	-	-	0.014	EPA1	0.014	D2	-	-
Copper	0.04	TX11	0.04	D2	-	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	350	350	350	NA	6	180	-
EFD Exposure frequency for dermal exposure	350	350	350	NA	6	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	2.053	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.887	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Commercial	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Date Completed: 30-nov-yy

Surface Soil Column Parameters		Value	(Units)
h_{cap}	Capillary zone thickness	NA	(m)
h_v	Vadose zone thickness	NA	(m)
ρ_s	Soil bulk density	1,7	(g/cm ³)
f_{oc}	Fraction organic carbon	0,01	(-)
θ_T	Soil total porosity	0,41	(-)
		<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w	Volumetric water content	0,369	(-)
θ_a	Volumetric air content	0,041	(-)
K_{vs}	Vertical hydraulic conductivity	864	(cm/d)
k_v	Vapor permeability	1E-12	(m ²)
L_{gw}	Depth to groundwater	NA	(m)
pH	Soil/groundwater pH	6,8	(-)
W	Length of source-zone area parallel to wind	45	(m)
W_{gw}	Length of source-zone area parallel to GW flow	NA	(m)
L_{ss}	Thickness of affected surface soils	1	(m)
A	Source zone area	2025	(m ²)
L_s	Depth to top of affected soils	0	(m)
L_{base}	Depth to base of affected soils	1	(m)
L_{subs}	Thickness of affected soils	1	(m)

Outdoor Air Parameters		Value	(Units)
U_{air}	Ambient air velocity in mixing zone	2,25	(m/s)
h_{air}	Air mixing zone height	2	(m)
Q/C	Inverse mean concentration at the center of source	NA	
P_a	Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_l	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependent on Um/Ut	NA	
PEF	Particulate Emission Factor	6,9E-12	

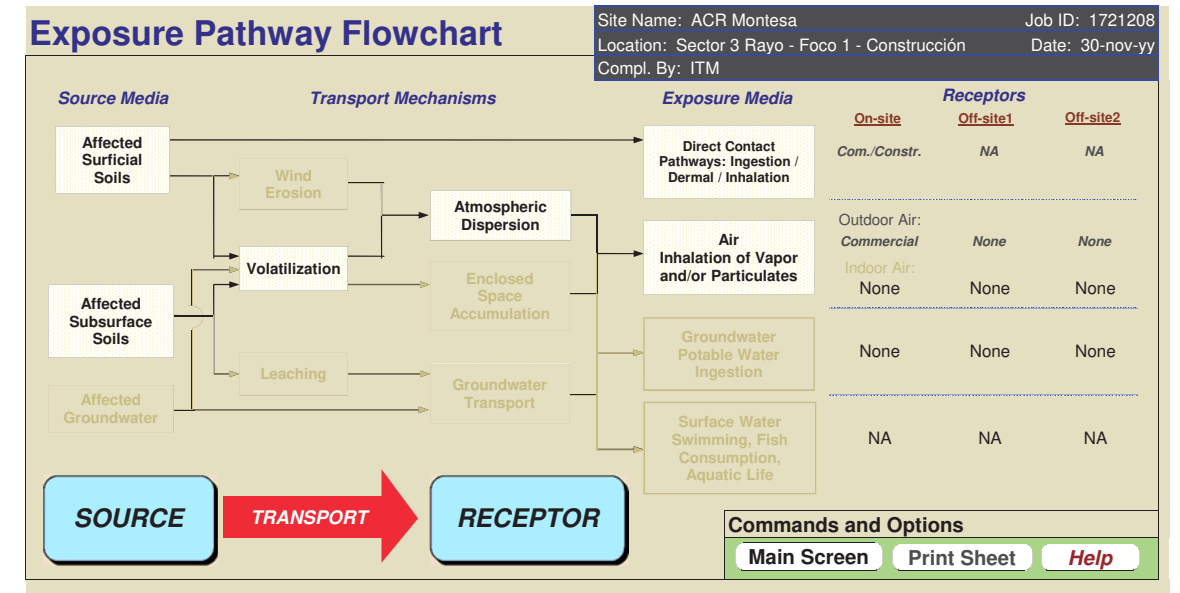
Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	NA	(m)
A_b	Foundation area	NA	NA	(m ²)
X_{crk}	Foundation perimeter	NA	NA	(m)
ER	Building air exchange rate	NA	NA	(1/s)
L_{crk}	Foundation thickness	NA	NA	(m)
Z_{crk}	Depth to bottom of foundation slab	NA	NA	(m)
η	Foundation crack fraction	NA	NA	(-)
dP	Indoor/outdoor differential pressure	NA	NA	(g/cm/s ²)
Q_s	Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack}	Volumetric water content of cracks	NA	NA	(-)
θ_{acrack}	Volumetric air content of cracks	NA	NA	(-)
BV	Building Volume	NA	NA	(m ³)
W	Building Width Perpendicular to GW flow	NA	NA	(m)
L	Building Length Parallel to GW flow	NA	NA	(m)
V	Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	NA	(m)
I_f	Net groundwater infiltration rate	NA	(cm/yr)
U_{gw}	Groundwater Darcy velocity	NA	(cm/d)
V_{gw}	Groundwater seepage velocity	NA	(cm/d)
K_s	Saturated hydraulic conductivity	NA	(cm/d)
i	Groundwater gradient	NA	(-)
S_w	Width of groundwater source zone	NA	(m)
S_d	Depth of groundwater source zone	NA	(m)
θ_{eff}	Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	Groundwater pH	NA	(-)
	Biodegradation considered?	NA	

Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		<u>Groundwater Ingestion</u>		<u>Groundwater to Indoor Air</u>		
α_x	Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y	Transverse dispersivity	NA	NA	NA	NA	(m)
α_z	Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport		<u>Soil to Outdoor Air Inhal.</u>		<u>GW to Outdoor Air Inhal.</u>		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(m ³ /s)
W_{pl}	Width of GW plume at SW discharge	NA	(m)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(m)
DF _{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
 Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)		Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))		
				TX11	TX11	TX11	TX11	TX11	TX11	TX11	TX11	Kd	TX11	
<i>Change - One or more parameter differs from User Chemical Database</i>														
Lead (Inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Copper	7440-50-8	M	63.546	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.60E+00	Kd	TX11
TPH - Aliph >C21-C34	T-ar2134	OT	400	-	0.0000025	-	1.58E+01	3.34E-07	-	7.26E-03	-	8.80E+00	Koc	-
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Phenanthrene	85-01-8	O	178.2334	TX11	0.394	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.19E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data																	
Constituent	CAS Number	Type	Molecular Weight (g/mole)	pH specific Kd for non-organics													
				Surface Soil Column			Water Bearing Unit			log(Kow) (@ 20 - 25 C) (log(L/kg))	Diffusion Coefficients						
				Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)		Air (cm ² /s)	Water (cm ² /s)	TX11	TX11			
<i>Change - One or more parameter differs from User Chemical Database</i>																	
Lead (Inorganic)	7439-92-1	M	207.2	-	-	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	-	-	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11
Copper	7440-50-8	M	63.546	-	-	-	-	-	-	-	-	-5.71E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
TPH - Aliph >C21-C34	T-ar2134	OT	400	-	-	-	-	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	TPH	1.00E-01	TPH	1.00E-05	TPH
Phenanthrene	85-01-8	O	178.2334	TX11	0.394	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.19E+00	TX11	3.33E-02	TX11	7.47E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors			Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor	
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
<i>Change - One or more parameter differs from User Chemical Database</i>												
Lead (Inorganic)	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	-
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2 6.60E-01	S2	3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	6.74E+04	850 LY
Copper	6.00E-02	S 6.00E-03	S	-	-	-	2.90E-01	2.50E-01	TX11	1.00E+00	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	890000 LY
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	10000 LY
Phenanthrene	1.00E-02	S2 6.60E-01	S2	4.00E+02	4.00E+02	H	-	-	1.00E+00	TX11	6.38E+00	6.78E+01 2630 LY

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
<i>Change - One or more parameter differs from User Chemical Database</i>						
Lead (Inorganic)	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Copper	0.001	-	-	-	-	D
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11
Copper	0.01754386	0.01	0.57	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Regulatory Standards				UK Soil Guideline Values			
	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m ³)		Residential/Plant	Residential/Allotments	Commercial/Industrial	
	MC	OS	5	OS	mg/kg	mg/kg	mg/kg	mg/kg
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-	-
Copper	1.3	MC	1	OS	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0189	T3
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E
Copper	-	-	0.0036	T1	1.3	E	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters													
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)		
	Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072	-
	Bis (2-ethyl-hexyl) phthalate	0.02	EPA-I	0.02	D2	-	-	0.014	EPA-I	0.014	D2	-	-
Copper	0.04	TX11	0.04	D2	-	-	-	-	-	-	-	-	
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	-	
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-	
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-	

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	30	30	30	NA	250	30	-
EFD	30	30	30	NA	250	30	-
IRw	1	1	2	2,5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0,5	0,5	0,05	0,3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0,025	0,025	0,025	0,053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg	0,01	0,01	0,01	NA	NA	NA	NA
VGabg	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: Ingestion, Dermal, Inhalation	Com./Constr.	NA	NA
Apply CLEA- UK SGV levels	No		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Commercial	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1,3	(m)
L_{sub} Thickness of affected soils	1,3	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
Q_{air} Air mixing zone height	2	(m)
Q/C	NA	
P_a Areal particulate emission rate	6,9E-14	(g/cm ² /s)
V	NA	
U_m Mean annual airvelocity at 7m	NA	
U_t Equivalent 7m air velocity threshold value	NA	
F(x)	NA	
PEF	6,9E-12	

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

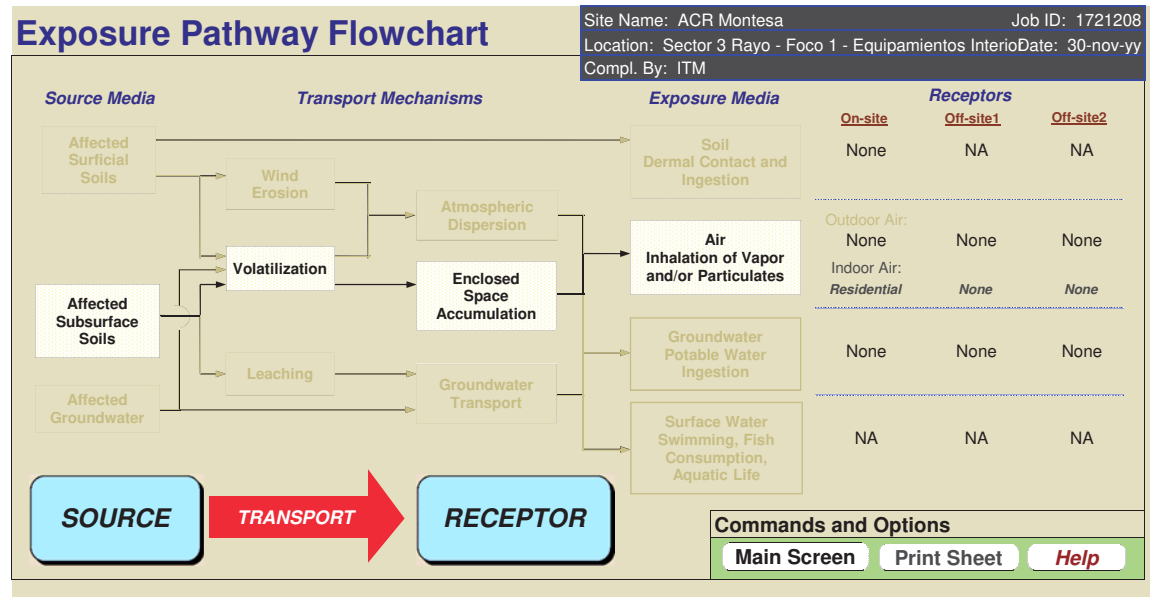
Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_i Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)	Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)	Henry's Constant (@ 20 - 25 C) (unitless)	log (Koc) or log (Kd) (@ 20 - 25 C)		log (L/kg)				
Lead (inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+08	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.89E+00	Koc	TX11
Copper	7440-50-8	M	63.546	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.60E+00	Kd	TX11
TPH - Aliph >C21-C34	T-al2134	OT	400	-	0.0000025	-	1.58E-01	3.34E-07	-	7.26E+03	-	8.80E+00	Koc	-
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Phenanthrene	85-01-6	O	178.2334	TX11	0.994	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.16E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data												
Constituent	pH specific Kd for non-organics						log(Kow) (@ 20 - 25 C) log(L/kg)	Diffusion Coefficients				
	Surface Soil Column			Water Bearing Unit				Air (cm ² /s)		Water (cm ² /s)		
	Slope	y-intercept	logKd_pH (L/kg)	Slope	y-intercept	logKd_pH (L/kg)						
Lead (Inorganic)	-	-	-	-	-	-	7.29E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-	8.39E+00	TX11	3.51E-02	TX11	3.66E-06	TX11
Copper	-	-	-	-	-	-	5.71E-01	TX11	0.00E+00	TX11	0.00E+00	TX11
TPH - Aliph >C21-C34	-	-	-	-	-	-	1.00E-01	-	1.00E-05	-	1.00E-05	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E-01	TPH	1.00E-05	TPH
Phenanthrene	-	-	-	-	-	-	4.35E+00	TX11	3.33E-02	TX11	7.47E-06	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Inte
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits				Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors		Relative Bioavailability Factor	Leaf Conc. Factor Calculated (mg/kg)/(mg/L)	Root Conc. Factor Calculated (mg/kg)/(mg/L)	Bioconcentration Factor
	Groundwater (mg/L)		Soil (mg/kg)		Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)				
Lead (Inorganic)	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	-
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2	6.60E-01	S2	3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	8.74E+04
Copper	6.00E-02	S	6.00E-03	S	-	-	-	2.90E-01	2.50E-01	TX11	1.00E+00	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	890000
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	1.00E+00	TX11	-	10000
Phenanthrene	1.00E-02	S2	6.60E-01	S2	4.00E+02	4.00E+02	H	-	1.00E+00	TX11	6.38E+00	6.78E+01

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Inte
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Lead (Inorganic)	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Copper	0.001	-	-	-	-	D
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	0.23	1.1	5.6	2.9	1,154823174	D

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Inte
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11
Copper	0.01754386	0.01	0.57	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.69	TX11
Phenanthrene	0.146067416	0.13	0.69	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Inte
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards						
Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values			
			Residential/Plant	Residential/Allotments	Commercial/Industrial	
Lead (Inorganic)	0.015	MC	50	OS	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-
Copper	1.3	MC	1	OS	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Inte
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Aquatic Life Protection				Surface Water Quality Criteria					
	Freshwater		Marine		Drink & Freshwater Fish		Human Health Protection		Saltwater Fish	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0163	T3
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E
Copper	-	-	0.0036	T1	1.3	E	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Inte
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters												
Constituent	Oral RID or TDSI (mg/kg/day)		Dermal RID or TDSI (mg/kg/day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor 1/(mg/kg/day)		Dermal Equivalent Slope Factor 1/(mg/kg/day)		Inhalation Equivalent Unit Risk Factor 1/(µg/m ³)	
	Value	Reference	Value	Reference	Value	Reference	Value	Reference	Value	Reference	Value	Reference
Lead (Inorganic)	-	-	-	-	-	-	0.0005	-	-	-	0.00012	-
Bis (2-ethylhexyl) phthalate	0.02	EPA1	0.02	D2	-	-	0.014	EPA1	0.014	D2	-	-
Copper	0.04	TX11	0.04	D2	-	-	-	-	-	-	-	-
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Inte
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior

Completed By: ITM
 Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW Body weight (kg)	15	35	70	NA	70	70	-
ED Exposure duration (yr)	6	12	30	NA	25	1	-
τ Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF Exposure frequency (days/yr)	125	125	125	NA	6	180	-
EFD Exposure frequency for dermal exposure	125	125	125	NA	6	180	-
IRw Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA Skin surface area (dermal) (cm ²)	2023	2023	3160	4771	3160	3160	-
M Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SASwim Skin surface area for swimming (cm ²)	3500	8100	23000	15680	NA	NA	NA
IRfish Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg Below-ground vegetable ingestion	0.002	0.002	0.006	0.733	NA	NA	NA
IRabg Above-ground vegetable ingestion	0.001	0.001	0.002	0.317	NA	NA	NA
VGbg Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
 ** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	None	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	Residential	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	NA	NA	NA	(m)
Indoor air inhalation receptor	0	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1.0E-5	1.0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	NA
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
	<u>capillary</u> <u>vadose</u> <u>foundation</u>	
θ_w Volumetric water content	0,369	(-)
θ_a Volumetric air content	0,041	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
k_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH Soil/groundwater pH	6,8	(-)
W Length of source-zone area parallel to wind	NA	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	NA	(m)
A Source zone area	NA	(m ²)
L_s Depth to top of affected soils	0	(m)
L_{base} Depth to base of affected soils	1	(m)
L_{subs} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	NA	(m/s)
h_{air} Air mixing zone height	NA	(m)
Q/C Inverse mean concentration at the center of source	NA	
P_a Areal particulate emission rate	NA	(g/cm ² /s)
V Fraction of vegetative cover	NA	
U_m Mean annual airvelocity at 7m	NA	
U_l Equivalent 7m air velocity threshold value	NA	
F(x) Windspeed function dependent on Um/Ut	NA	
PEF Particulate Emission Factor	NA	

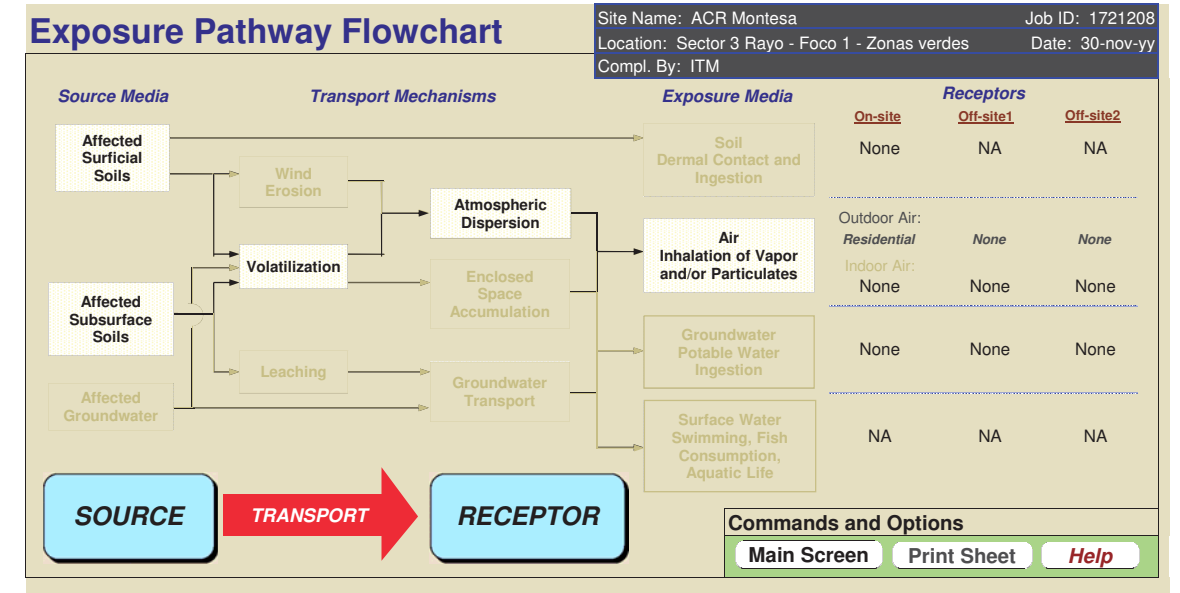
Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	2	NA	(m)
A_b Foundation area	70	NA	(m ²)
X_{crk} Foundation perimeter	49	NA	(m)
ER Building air exchange rate	0,00014	NA	(1/s)
L_{crk} Foundation thickness	0,15	NA	(m)
Z_{crk} Depth to bottom of foundation slab	0,15	NA	(m)
η Foundation crack fraction	0,001	NA	(-)
dP Indoor/outdoor differential pressure	0	NA	(g/cm/s ²)
Q_s Convective air flow through slab	0	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	0,12	NA	(-)
θ_{acrack} Volumetric air content of cracks	0,26	NA	(-)
BV Building Volume	NA	NA	(m ³)
W Building Width Perpendicular to GW flow	NA	NA	(m)
L Building Length Parallel to GW flow	NA	NA	(m)
V Saturated Soil Zone Porosity	NA	NA	(-)

Groundwater Parameters	Value	(Units)
δ_{gw} Groundwater mixing zone depth	NA	(m)
I_f Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i Groundwater gradient	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat} Groundwater pH	NA	(-)
Biodegradation considered?	NA	

Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF Air dispersion factor	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{pl} Width of GW plume at SW discharge	NA	(m)
δ_{pl} Thickness of GW plume at SW discharge	NA	(m)
DF _{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable
 Orange = Site-specific value (different from current default value)



CHEMICAL DATA FOR SELECTED COCs

Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)		Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))		
				TX11	TX11	TX11	TX11	TX11	TX11	TX11	TX11	Kd	TX11	
<i>Change - One or more parameter differs from User Chemical Database</i>														
Lead (Inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Copper	7440-50-8	M	63.546	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.60E+00	Kd	TX11
TPH - Aliph >C21-C34	T-ar2134	OT	400	-	0.0000025	-	1.58E+01	3.34E-07	-	7.26E-03	-	8.80E+00	Koc	-
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Phenanthrene	85-01-8	O	178.2334	TX11	0.394	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.19E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data														
Constituent	CAS Number	Type	Molecular Weight (g/mole)	Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)		Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) (log(L/kg))		
				TX11	TX11	TX11	TX11	TX11	TX11	TX11	TX11	Kd	TX11	
<i>Change - One or more parameter differs from User Chemical Database</i>														
Lead (Inorganic)	7439-92-1	M	207.2	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.00E+00	Kd	TX11
Bis (2-ethyl-hexyl) phthalate	117-81-7	O	390.56332	TX11	0.3	TX11	2.04E+03	6.45E-06	TX11	4.57E-04	TX11	5.83E+00	Koc	TX11
Copper	7440-50-8	M	63.546	TX11	0	TX11	1.00E+06	0.00E+00	TX11	0.00E+00	TX11	1.60E+00	Kd	TX11
TPH - Aliph >C21-C34	T-ar2134	OT	400	-	0.0000025	-	1.58E+01	3.34E-07	-	7.26E-03	-	8.80E+00	Koc	-
TPH - Arom >C21-C35	T-ar2134	OT	240	TPH	0.0066	TPH	8.31E+00	3.34E-07	TPH	6.60E-04	TPH	5.10E+00	Koc	TPH
Phenanthrene	85-01-8	O	178.2334	TX11	0.394	TX11	1.40E+02	6.80E-04	TX11	5.40E-03	TX11	4.19E+00	Koc	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters												
Constituent	Analytical Detection Limits		Half Life (First-Order Decay)		Soil-to-Plant Biotransfer Factors			Relative Bioavailability Factor	Leaf Concn. Calculated (mg/kg)(mg/L)	Root Concn. Calculated (mg/kg)(mg/L)	Bioconcentration Factor	
	Groundwater (mg/L)	Soil (mg/kg)	Saturated (days)	Unsaturated (days)	Above-grd (unitless)	Below-grd (unitless)						
<i>Change - One or more parameter differs from User Chemical Database</i>												
Lead (Inorganic)	-	-	-	-	-	-	-	1.00E+00	TX11	-	-	-
Bis (2-ethyl-hexyl) phthalate	1.00E-02	S2 6.60E-01	S2	3.89E+02	3.89E+02	H	-	1.00E+00	TX11	1.10E-02	6.74E+04	850 LY
Copper	6.00E-02	S 6.00E-03	S	-	-	-	2.90E-01	2.50E-01	TX11	1.00E+00	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	1.00E+00	TX11	890000 LY
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	1.00E+00	TX11	10000 LY
Phenanthrene	1.00E-02	S2 6.60E-01	S2	4.00E+02	4.00E+02	H	-	-	-	1.00E+00	TX11	6.38E+00 6.78E+01 2630 LY

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure						
Constituent	Water Dermal Permeability Data					
	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
<i>Change - One or more parameter differs from User Chemical Database</i>						
Lead (Inorganic)	-	-	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	-	-
Copper	0.001	-	-	-	-	D
TPH - Aliph >C21-C34	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-
Phenanthrene	0.23	1.1	5.6	2.9	1.154823174	D

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Dermal Relative Abs. Factor Calculated	Absorption Fraction		TX11
		Dermal (unitless)	Gastrointestinal (unitless)	
Lead (Inorganic)	0.06666667	0.01	0.15	TX11
Bis (2-ethyl-hexyl) phthalate	0.526315789	0.1	0.19	TX11
Copper	0.01754386	0.01	0.57	TX11
TPH - Aliph >C21-C34	0.2	0.1	0.5	TX11
TPH - Arom >C21-C35	0.146067416	0.13	0.89	TX11
Phenanthrene	0.146067416	0.13	0.89	TX11

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Constituent	Maximum Contaminant Level (mg/L)	Time-Weighted Average Workplace Criteria (mg/m ³)	UK Soil Guideline Values					
			Residential/Plant	Residential/Allotments	Commercial/Industrial			
			mg/kg	mg/kg	mg/kg	mg/kg		
Lead (Inorganic)	0.015	MC	50	OS	-	-	-	-
Bis (2-ethyl-hexyl) phthalate	0.006	MC	5	OS	-	-	-	-
Copper	1.3	MC	1	OS	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards										
Constituent	Surface Water Quality Criteria									
	Aquatic Life Protection				Human Health Protection			Saltwater Fish		
	Freshwater (mg/L)		Marine (mg/L)		Drink & Freshwater Fish (mg/L)		Freshwater Fish (mg/L)		Saltwater Fish (mg/L)	
Lead (Inorganic)	-	-	0.0053	T1	0.00498	T3	0.025	T3	0.0189	T3
Bis (2-ethyl-hexyl) phthalate	-	-	-	-	0.018	E	0.059	E	0.059	E
Copper	-	-	0.0036	T1	1.3	E	-	-	-	-
TPH - Aliph >C21-C34	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C21-C35	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.03	T1	0.0046	T1	-	-	-	-	-	-

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

CHEMICAL DATA FOR SELECTED COCs

Toxicity Parameters													
Constituent	Oral RID or TDSI (mg/kg-day)		Dermal RID or TDSI (mg/kg-day)		Inhalation Equivalent RIC or TCA (mg/m ³)		Oral Equivalent Slope Factor (1/mg/kg-day)		Dermal Equivalent Slope Factor (1/mg/kg-day)		Inhalation Equivalent Unit Risk Factor (1/ug/m ³)		
	Lead (Inorganic)	-	-	-	-	-	-	0.0085	-	-	-	0.00072	-
	Bis (2-ethyl-hexyl) phthalate	0.02	EPA-I	0.02	D2	-	-	0.014	EPA-I	0.014	D2	-	-
Copper	0.04	TX11	0.04	D2	-	-	-	-	-	-	-	-	
TPH - Aliph >C21-C34	1.6	TX11	1.6	D2	-	-	-	-	-	-	-	-	
TPH - Arom >C21-C35	0.03	TPH	0.03	D2	-	-	-	-	-	-	-	-	
Phenanthrene	0.03	TX11	0.03	D2	-	-	-	-	-	-	-	-	

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes
 Job ID: 1721208
 Date Completed: 30-nov-yy
 Completed By: ITM

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Exposure Parameters	Residential				Commercial/Industrial		User Defined
	Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	70	70	70	NA	70	70	-
ATn	6	12	30	NA	25	1	-
BW	15	35	70	NA	70	70	-
ED	6	12	30	NA	25	1	-
τ	30	30	30	NA	30	30	-
EF	30	30	30	NA	250	180	-
EFD	30	30	30	NA	250	180	-
IRw	1	1	2	2,5	1	NA	-
IRs	200	200	100	387	50	100	-
SA	2023	2023	3160	4771	3160	3160	-
M	0,5	0,5	0,5	NA	0,5	0,5	-
ETswim	1	3	3	NA	NA	NA	NA
EVswim	12	12	12	NA	NA	NA	NA
IRswim	0,5	0,5	0,05	0,3	NA	NA	NA
SAswim	3500	8100	23000	15680	NA	NA	NA
IRfish	0,025	0,025	0,025	0,053	NA	NA	NA
FFish	1	1	1	NA	NA	NA	NA
IRbg	0,002	0,002	0,006	0,176	NA	NA	NA
IRabg	0,001	0,001	0,002	0,076	NA	NA	NA
VGbg	0,01	0,01	0,01	NA	NA	NA	NA
VGabg	0,01	0,01	0,01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens
** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Residential	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	None	NA	NA
Volatilization from Groundwater	None	None	None
Soil Leaching to Groundwater Volatilization	None	None	None

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	NA	NA	NA	(m)
Outdoor air inhalation receptor	0	NA	NA	(m)
Indoor air inhalation receptor	NA	NA	NA	(m)

Target Health Risk Values	Individual	Cumulative
TR Target Risk (carcinogens)	1,0E-5	1,0E-5
THQ Target Hazard Quotient (non-carcinogenic risk)	1,0E+0	1,0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & Subsurface Models: ASTM Model
Indoor air volatilization model	NA
Soil leaching model	NA
Use soil attenuation model (SAM) for leachate?	NA
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

RBCA SITE ASSESSMENT **Input Parameter Summary**

Site Name: ACR Montesa
Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Surface Soil Column Parameters	Value	(Units)
h_{cap} Capillary zone thickness	NA	(m)
h_v Vadose zone thickness	NA	(m)
ρ_s Soil bulk density	1,7	(g/cm ³)
f_{oc} Fraction organic carbon	0,01	(-)
θ_T Soil total porosity	0,41	(-)
θ_w Volumetric water content	capillary 0,369 vadose 0,08 foundation 0,12	(-)
θ_a Volumetric air content	0,041 0,33 0,26	(-)
K_{vs} Vertical hydraulic conductivity	864	(cm/d)
K_v Vapor permeability	1E-12	(m ²)
L_{gw} Depth to groundwater	NA	(m)
pH	6,8	(-)
W	45	(m)
W_{gw} Length of source-zone area parallel to GW flow	NA	(m)
L_{ss} Thickness of affected surface soils	1	(m)
A	2025	(m ²)
L_{ts} Depth to top of affected soils	0,3	(m)
L_{tbas} Depth to base of affected soils	1,3	(m)
L_{tbas} Thickness of affected soils	1	(m)

Outdoor Air Parameters	Value	(Units)
U_{air} Ambient air velocity in mixing zone	2,25	(m/s)
Q_{air} Air mixing zone height	2	(m)
Q/C	NA	(g/cm ² /s)
P_a Areal particulate emission rate	NA	(g/cm ² /s)
V	NA	(-)
U_m Mean annual airvelocity at 7m	NA	(-)
U_l Equivalent 7m air velocity threshold value	NA	(-)
F(x)	NA	(-)
PEF	NA	(-)

Building Parameters	Residential	Commercial	(Units)
L_b Building volume/area ratio	NA	NA	(m)
A_b Foundation area	NA	NA	(m ²)
X_{crk} Foundation perimeter	NA	NA	(m)
ER	NA	NA	(1/s)
L_{crk} Foundation thickness	NA	NA	(m)
Z_{crk} Depth to bottom of foundation slab	NA	NA	(m)
η Foundation crack fraction	NA	NA	(-)
dP	NA	NA	(g/cm ² /s ²)
Q_s Convective air flow through slab	NA	NA	(m ³ /s)
θ_{wcrack} Volumetric water content of cracks	NA	NA	(-)
θ_{acrack} Volumetric air content of cracks	NA	NA	(-)
BV	NA	NA	(m ³)
w	NA	NA	(m)
L	NA	NA	(m)
v	NA	NA	(-)

Groundwater Parameters	Value	(Units)
θ_{gw} Groundwater mixing zone depth	NA	(m)
I_i Net groundwater infiltration rate	NA	(cm/yr)
U_{gw} Groundwater Darcy velocity	NA	(cm/d)
V_{gw} Groundwater seepage velocity	NA	(cm/d)
K_s Saturated hydraulic conductivity	NA	(cm/d)
i	NA	(-)
S_w Width of groundwater source zone	NA	(m)
S_d Depth of groundwater source zone	NA	(m)
θ_{eff} Effective porosity in water-bearing unit	NA	(-)
f_{oc-sat} Fraction organic carbon in water-bearing unit	NA	(-)
pH _{sat}	NA	(-)
Biodegradation considered?	NA	(-)

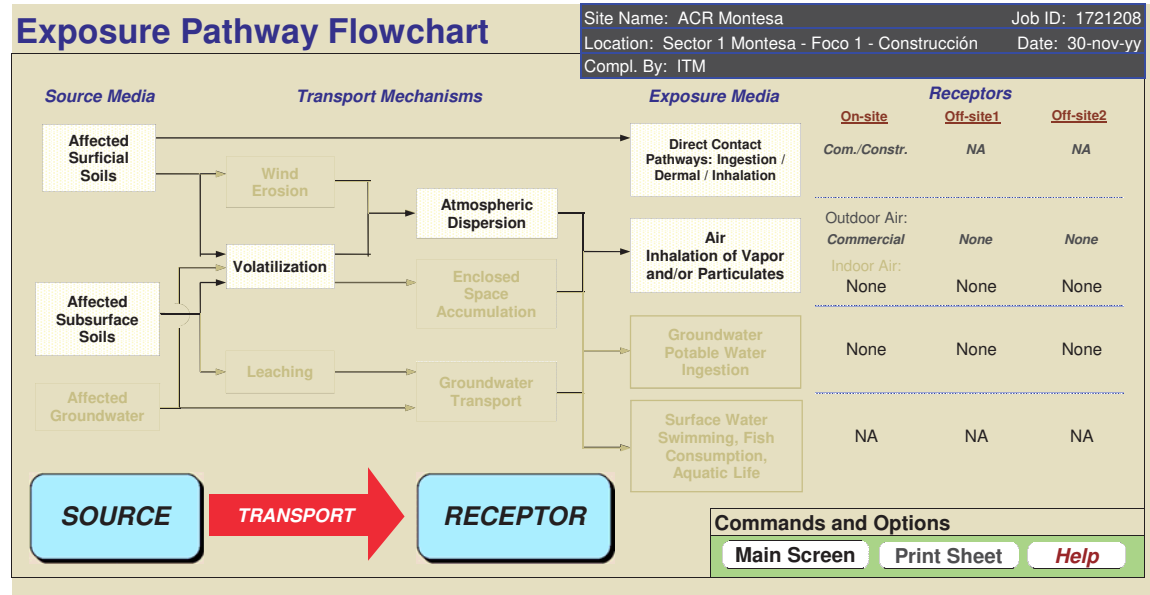
Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport					
α_x Longitudinal dispersivity	NA	NA	NA	NA	(m)
α_y Transverse dispersivity	NA	NA	NA	NA	(m)
α_z Vertical dispersivity	NA	NA	NA	NA	(m)
Lateral Outdoor Air Transport					
σ_y Transverse dispersion coefficient	NA	NA	NA	NA	(m)
σ_z Vertical dispersion coefficient	NA	NA	NA	NA	(m)
ADF	NA	NA	NA	NA	(-)

Surface Water Parameters	Off-site 2	(Units)
Q_{sw} Surface water flowrate	NA	(m ³ /s)
W_{sw} Width of GW plume at SW discharge	NA	(m)
δ_{sw} Thickness of GW plume at SW discharge	NA	(m)
DF_{sw} Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

Anexo 2 Resultados del cálculo de riesgos



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

1 OF 3

SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)

SURFACE SOILS: ON SITE INGESTION, DERMAL EXPOSURE

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	1.4E+2	1.2E-6	1.3E-7	1.7E-4	1.8E-5
Benzo-a-pyrene	2.8E-1	9.8E-7	5.5E-9	2.7E-7	1.6E-9
Benzo-g,h,i-perylene	1.5E-1	2.7E-6	3.9E-7	4.1E-7	5.8E-8
Phenanthrene	2.0E-1	2.7E-6	3.9E-7	5.5E-7	7.8E-8
Trichloroethane, 1,1,1-	6.5E-1	4.9E-7	1.2E-7	3.2E-7	7.6E-8
Methylene bromide	2.5E-2	1.7E-7	1.7E-9	4.4E-9	4.2E-11

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 1 - Construcción Date Completed: 30-nov-yy
 Completed By: ITM Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										2 OF 3	
SOIL EXPOSURE PATHWAY										(Checked if Pathway is Complete)	
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =	
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)			
		Commercial	Construction Worker	Commercial	Construction Worker						
Lead (inorganic) *	TRUE	2.4E-5	5.2E-5	2.3E-7	2.5E-7	8.6E-2	-	6.5E-6	4.1E-8		
Benzo-a-pyrene	TRUE	4.9E-8	2.3E-7	4.7E-10	1.1E-9	7.3E+0	7.3E+0	2.0E-6	1.1E-8		
Benzo-g,h,i-perylene	FALSE			Missing Sfo	Tox?	-	-				
Phenanthrene	FALSE			Missing Sfo	Tox?	-	-				
Trichloroethane, 1,1,1-	FALSE			Missing Sfo	Tox?	-	-				
Methylene bromide	TRUE	4.4E-9	0.0E+0	4.2E-11	0.0E+0	7.5E-3	7.5E-3	3.3E-11	3.1E-13		
* No dermal slope factor available--oral slope factor used.											
										8.5E-6	5.3E-8

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										3 OF 3	
SOIL EXPOSURE PATHWAY										(Checked if Pathway is Complete)	
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =	
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)			
		Commercial	Construction Worker	Commercial	Construction Worker						
Lead (inorganic) *	TRUE	2.4E-5	5.2E-5	2.3E-7	2.5E-7	8.6E-2	-	6.5E-6	4.1E-8		
Benzo-a-pyrene	TRUE	4.9E-8	2.3E-7	4.7E-10	1.1E-9	7.3E+0	7.3E+0	2.0E-6	1.1E-8		
Benzo-g,h,i-perylene	FALSE			Missing Sfo	Tox?	-	-				
Phenanthrene	FALSE			Missing Sfo	Tox?	-	-				
Trichloroethane, 1,1,1-	FALSE			Missing Sfo	Tox?	-	-				
Methylene bromide	TRUE	4.4E-9	0.0E+0	4.2E-11	0.0E+0	7.5E-3	7.5E-3	3.3E-11	3.1E-13		
* No dermal slope factor available--oral slope factor used.											
										8.5E-6	5.3E-8

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)

SURFACE SOILS (0 - 1 m):

VAPOR INHALATION	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Constituents of Concern									
Lead (inorganic) *	1,4E+2	Error							
Benzo-a-pyrene	2,8E-1	3,7E+7			7,6E-9				
Benzo-g,h,i-perylene	1,5E-1	7,7E+7			1,9E-9				
Phenanthrene	2,0E-1	4,8E+5			4,2E-7				
Trichloroethane, 1,1,1-	6,5E-1	4,3E+4			1,5E-5				
Methylene bromide	2,5E-2	4,3E+4			5,8E-7				

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS

SURFACE SOILS (0 - 1 m):

VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF*ED)/(AT*365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Constituents of Concern								
Lead (inorganic) *	2,4E-1							
Benzo-a-pyrene	2,4E-1				1,9E-9			
Benzo-g,h,i-perylene	6,8E-1				1,3E-9			
Phenanthrene	6,8E-1				2,8E-7			
Trichloroethane, 1,1,1-	6,8E-1				1,0E-5			
Methylene bromide	6,8E-1				4,0E-7			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	None	None	Commercial	None	None
Constituents of Concern							
Lead (inorganic) *	1,4E+2	VFsamb					
Benzo-a-pyrene	2,8E-1	3,1E+10			9,1E-12		
Benzo-g,h,i-perylene	1,5E-1	1,4E+11			1,1E-12		
Phenanthrene	2,0E-1	5,3E+6			3,8E-8		
Trichloroethane, 1,1,1-	6,5E-1	4,3E+4			1,5E-5		
Methylene bromide	2,5E-2	4,3E+4			5,8E-7		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *	2,4E-1					
Benzo-a-pyrene	2,4E-1			2,2E-12		
Benzo-g,h,i-perylene	6,8E-1			7,6E-13		
Phenanthrene	6,8E-1			2,6E-8		
Trichloroethane, 1,1,1-	6,8E-1			1,0E-5		
Methylene bromide	6,8E-1			4,0E-7		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Lead (inorganic) *							
Benzo-a-pyrene							
Benzo-g,h,i-perylene							
Phenanthrene							
Trichloroethane, 1,1,1-							
Methylene bromide							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern	None	None	None	None	None	None
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Trichloroethane, 1,1,1-						
Methylene bromide						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Lead (inorganic) *				
Benzo-a-pyrene	1.9E-9			
Benzo-g,h,i-perylene	1.3E-9			
Phenanthrene	2.8E-7			
Trichloroethane, 1,1,1-	1.0E-5			
Methylene bromide	4.0E-7			

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 1 - Construcción
Completed By: ITM

Date Completed: 30-nov-yy
Job ID: 1721208

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1.2E-5				
Benzo-a-pyrene	TRUE	1.9E-9		-	-	8.8E-4	1.6E-9			
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Trichloroethane, 1,1,1-	FALSE	-	-	-	-	-				
Methylene bromide	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =							1.6E-9			

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

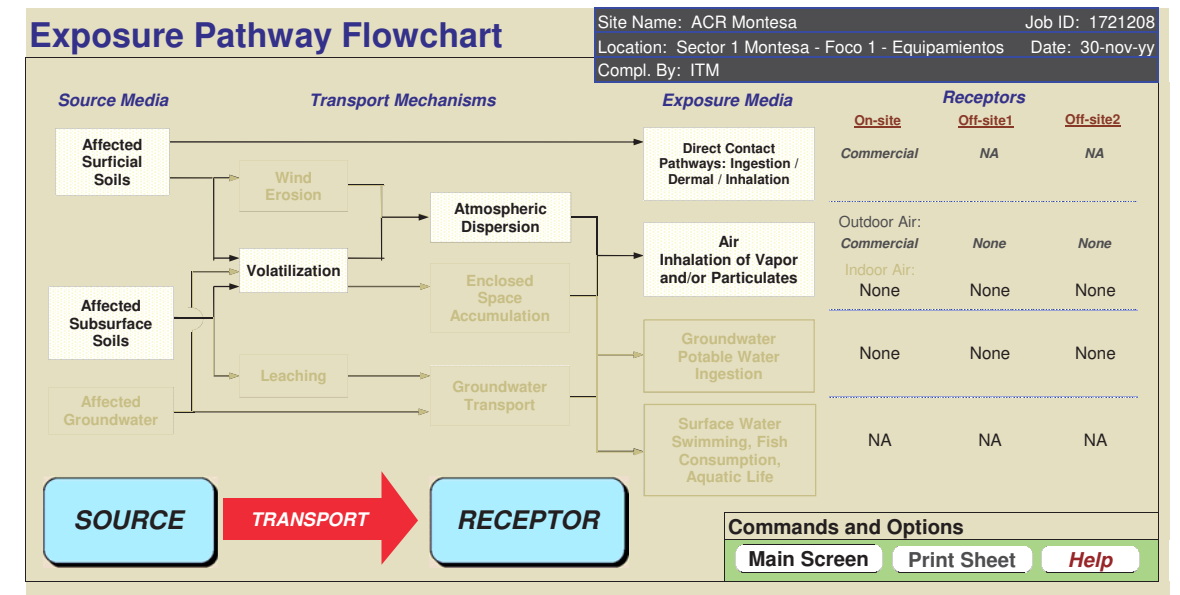
Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
Benzo-a-pyrene	5,2E-9				-				
Benzo-g,h,i-perylene	1,3E-9				-				
Phenanthrene	2,8E-7				-				
Trichloroethane, 1,1,1-	1,0E-5				5,0E+0	2,1E-6			
Methylene bromide	4,0E-7				4,0E-3	1,0E-4			
Total Pathway Hazard Index =						1,0E-4			

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)						
Constituents of Concern	1) Source/Exposure Medium		2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker	
Lead (inorganic) *	1,4E+2	2,9E-8		4,1E-6	-	
Benzo-a-pyrene	2,8E-1	2,4E-8		6,6E-9	-	
Benzo-g,h,i-perylene	1,5E-1	6,6E-8		9,9E-9	-	
Phenanthrene	2,0E-1	6,6E-8		1,3E-8	-	
Trichloroethane, 1,1,1-	6,5E-1	1,2E-8		7,6E-9	-	
Methylene bromide	2,5E-2	4,2E-9		1,0E-10	-	

NOTE: RAF = Relative absorption factor (-)	AT = Averaging time (days)	ED = Exposure duration (yrs)	IR = Soil ingestion rate (mg/day)
M = Adherence factor (mg/cm ²)	BW = Body weight (kg)	EF = Exposure frequency (days/yr)	SA = Skin exposure area (cm ² /day)
Site Name: ACR Montesa	Site Location: Sector 1 Montesa - Foco 1 - Equipamientos	Date Completed: 30-nov-yy	Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		Commercial		Construction Worker		(a) Oral	(b) Dermal	Commercial	Construction Worker
		(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact			(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
Lead (inorganic) *	TRUE	5,9E-7	1,2E-6			8,5E-3	-	1,6E-8	-
Benzo-a-pyrene	TRUE	1,2E-9	5,4E-9			7,3E+0	7,3E+0	4,8E-8	-
Benzo-g,h,i-perylene	FALSE					-	-	-	-
Phenanthrene	FALSE					-	-	-	-
Trichloroethane, 1,1,1-	FALSE					-	-	-	-
Methylene bromide	TRUE	1,0E-10	0,0E+0			7,5E-3	7,5E-3	7,9E-13	-

* No dermal slope factor available—oral slope factor used.

Total Pathway Carcinogenic Risk = 6,4E-8

Site Name: ACR Montesa	Site Location: Sector 1 Montesa - Foco 1 - Equipamientos	Date Completed: 30-nov-yy	Completed By: ITM
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TIER 2 PATHWAY RISK CALCULATION								
SOIL EXPOSURE PATHWAY 3 OF 3								
■ (Checked if Pathway is Complete)								
Constituents of Concern	TOXIC EFFECTS				(7) Individual COC Hazard Quotient (5a)/(6a) + (5b)/(6b) (5c)/(6a) + (5d)/(6b)			
	(5) Total Toxicant Intake Rate (mg/kg/day)		(6) Reference Dose (mg/kg-day)					
	(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(a) Oral	(b) Dermal	Commercial	Construction Worker
Lead (inorganic) *	Tox?	Tox?			-	-		
Benzo-a-pyrene	Tox?	Tox?			-	-		
Benzo-g,h,i-perylene	1.8E-9	8.1E-9			3.0E-2	3.0E-2	3.3E-7	
Phenanthrene	2.3E-9	1.1E-8			3.0E-2	3.0E-2	4.4E-7	
Trichloroethane, 1,1,1-	7.6E-9	0.0E+0			2.0E+0	2.0E+0	3.8E-9	
Methylene bromide	2.9E-10	0.0E+0			6.0E-2	6.0E-2	4.9E-9	
* No dermal reference dose available--oral reference dose used.								
Total Pathway Hazard Index =							7.8E-7	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT								
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS 1 OF 9								
■ (Checked if Pathway is Complete)								
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg)				3) Exposure Medium		
	Soil Conc. (mg/kg)	Receptor				Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None
Lead (inorganic) *	1.4E+2	Error						
Benzo-a-pyrene	2.8E-1	3.7E+7			7.6E-9			
Benzo-g,h,i-perylene	1.5E-1	7.7E+7			1.9E-9			
Phenanthrene	2.0E-1	4.8E+5			4.2E-7			
Trichloroethane, 1,1,1-	6.5E-1	5.6E+4			1.2E-5			
Methylene bromide	2.5E-2	5.6E+4			4.5E-7			

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
SURFACE SOILS (0 - 1 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (d) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Constituents of Concern								
Lead (inorganic) *	5,9E-3				4,5E-11			
Benzo-a-pyrene	5,9E-3							
Benzo-g,h,i-perylene	1,6E-2				3,2E-11			
Phenanthrene	1,6E-2				6,8E-9			
Trichloroethane, 1,1,1-	1,6E-2				1,9E-7			
Methylene bromide	1,6E-2				7,4E-9			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	None	None	Commercial	None	None
Constituents of Concern							
Lead (inorganic) *	1,4E+2						
Benzo-a-pyrene	2,8E-1						
Benzo-g,h,i-perylene	1,5E-1						
Phenanthrene	2,0E-1						
Trichloroethane, 1,1,1-	6,5E-1						
Methylene bromide	2,5E-2						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Trichloroethane, 1,1,1-						
Methylene bromide						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration		2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)	
	1) Source Medium	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)
			None	None	None	None	None
Constituents of Concern							
Lead (inorganic) *							
Benzo-a-pyrene							
Benzo-g,h,i-perylene							
Phenanthrene							
Trichloroethane, 1,1,1-							
Methylene bromide							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED) _i (AT×365) _i (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Trichloroethane, 1,1,1-						
Methylene bromide						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Constituents of Concern				
Lead (inorganic) *				
Benzo-a-pyrene	4,5E-11			
Benzo-g,h,i-perylene	3,2E-11			
Phenanthrene	6,8E-9			
Trichloroethane, 1,1,1-	1,9E-7			
Methylene bromide	7,4E-9			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1,2E-5				
Benzo-a-pyrene	TRUE	4,5E-11		-	-	8,8E-4	4,0E-11			
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Trichloroethane, 1,1,1-	FALSE	-	-	-	-	-				
Methylene bromide	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =							4,0E-11			

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 1 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208

RBCA SITE ASSESSMENT

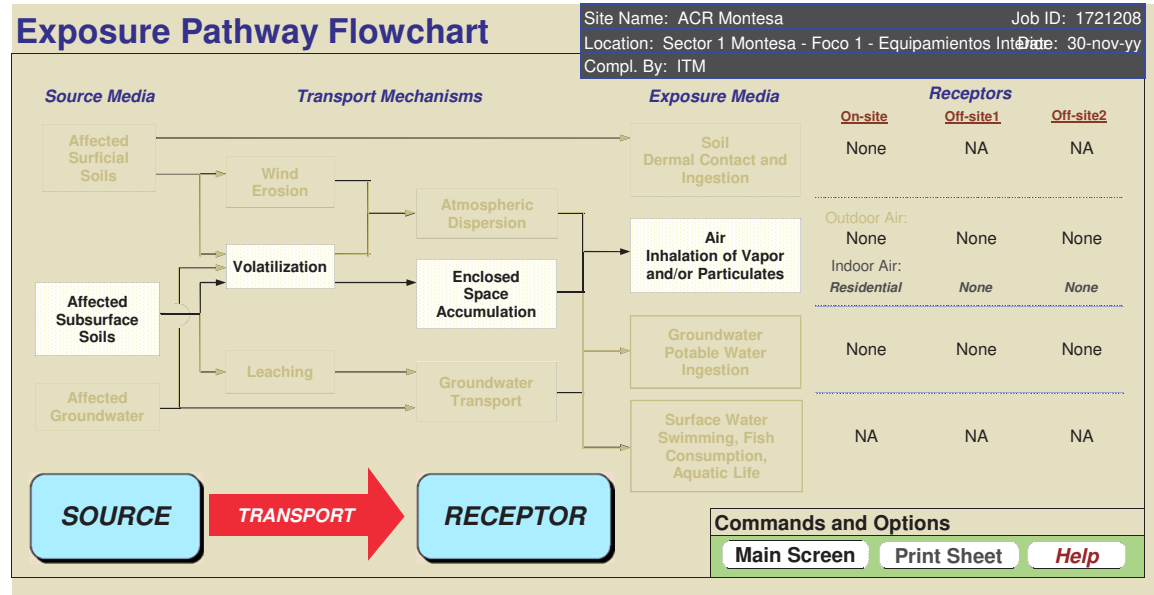
9 OF 9

TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
Benzo-a-pyrene	1,3E-10				-				
Benzo-g,h,i-perylene	3,2E-11				-				
Phenanthrene	6,8E-9				-				
Trichloroethane, 1,1,1-	1,9E-7				5,0E+0	3,8E-8			
Methylene bromide	7,4E-9				4,0E-3	1,8E-6			
Total Pathway Hazard Index =						1,9E-6			

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 1 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



RBCA SITE ASSESSMENT

1 OF 8

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

Constituents of Concern	1) Source Medium	2) NAF Value (L/kg) Receptor	3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)	5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)
	Soil Conc. (mg/kg)	On-site (0 m) Residential	On-site (0 m) Residential	On-site (0 m) Residential	On-site (0 m) Residential
Lead (inorganic) *	1.4E+2	zero VF	1.5E-11	1.5E-1	2.2E-12
Benzo-a-pyrene	2.8E-1	1.9E+10	8.0E-12	3.4E-1	2.7E-12
Benzo-g,h,i-perylene	1.5E-1	1.9E+10	4.7E-8	3.4E-1	1.6E-8
Phenanthrene	2.0E-1	4.2E+6	4.2E-3	3.4E-1	1.4E-3
Trichloroethane, 1,1,1-	6.5E-1	1.6E+2	6.9E-6	3.4E-1	2.4E-6
Methylene bromide	2.5E-2	3.6E+3			

* = Chemical with user-specified data
 NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT							
2 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /L)			3) Exposure Medium		
		Receptor			Indoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern							
	Lead (inorganic) *						
	Benzo-a-pyrene						
	Benzo-g,h,i-perylene						
	Phenanthrene						
	Trichloroethane, 1,1,1-						
	Methylene bromide						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT						
3 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS	Exposure Concentration					
	4) Exposure Multiplier (EF*ED)/(AT*365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern						
	Lead (inorganic) *					
	Benzo-a-pyrene					
	Benzo-g,h,i-perylene					
	Phenanthrene					
	Trichloroethane, 1,1,1-					
	Methylene bromide					
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208		

RBCA SITE ASSESSMENT								
4 OF 8								
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)								
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS								
	Exposure Concentration		2) NAF Value (m ³ /L)			3) Exposure Medium		
	1) Source Medium		Receptor			Indoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	
Constituents of Concern	Soil Conc. (mg/kg)	None	None	None	None	None	None	
Lead (inorganic) *	1.4E+2							
Benzo-a-pyrene	2.8E-1							
Benzo-g,h,i-perylene	1.5E-1							
Phenanthrene	2.0E-1							
Trichloroethane, 1,1,1-	6.5E-1							
Methylene bromide	2.5E-2							
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure								
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208				

RBCA SITE ASSESSMENT							
5 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS							
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS							
	4) Exposure Multiplier			5) Average Inhalation Exposure			
	(EF*ED)/(AT*365) (unitless)			Concentration (mg/m ³) (3) X (4)			
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	
Constituents of Concern	None	None	None	None	None	None	
Lead (inorganic) *							
Benzo-a-pyrene							
Benzo-g,h,i-perylene							
Phenanthrene							
Trichloroethane, 1,1,1-							
Methylene bromide							
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT			
6 OF 8			
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION			
INDOOR AIR EXPOSURE PATHWAYS			
MAXIMUM PATHWAY EXPOSURE (mg/m ³) (Maximum average exposure concentration from soil and groundwater routes.)			
Constituents of Concern	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	None	None
Lead (inorganic) *			
Benzo-a-pyrene	2,2E-12		
Benzo-g,h,i-perylene	2,7E-12		
Phenanthrene	1,6E-8		
Trichloroethane, 1,1,1-	1,4E-3		
Methylene bromide	2,4E-6		

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

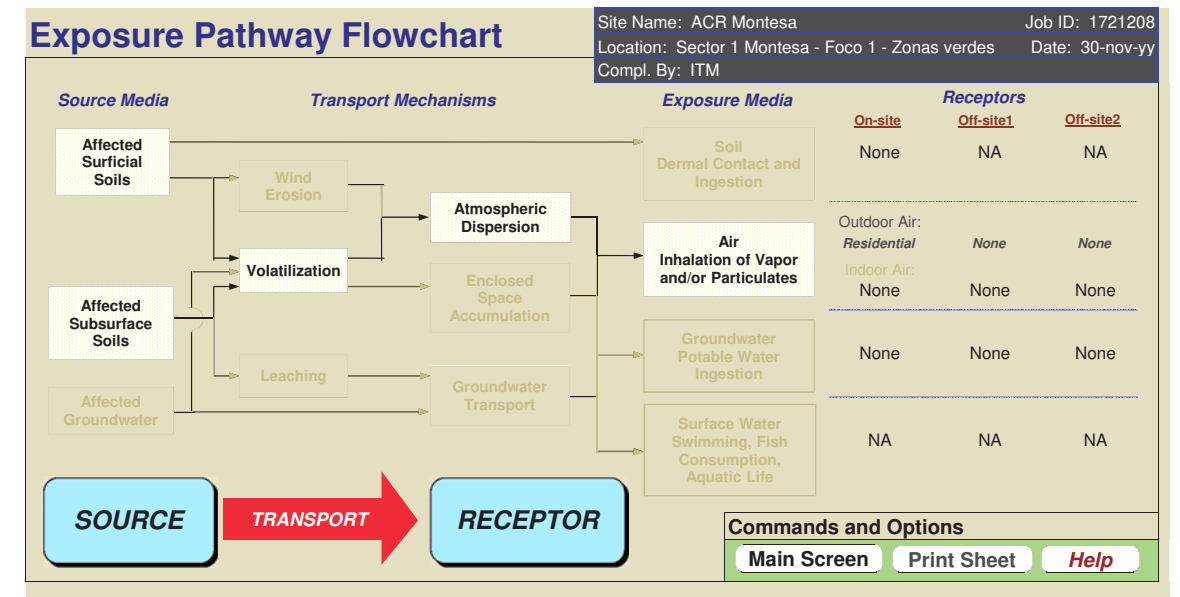
RBCA SITE ASSESSMENT								
7 OF 8								
TIER 2 PATHWAY RISK CALCULATION								
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)								
Constituents of Concern	(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m ³)			(3) Inhalation Unit Risk Factor (µg/m ⁻³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	None	None		Residential	None	None
Lead (inorganic) *	TRUE		-	-	1,2E-5			
Benzo-a-pyrene	TRUE	2,2E-12	-	-	8,8E-4	1,9E-12		
Benzo-g,h,i-perylene	FALSE	-	-	-	-			
Phenanthrene	FALSE	-	-	-	-			
Trichloroethane, 1,1,1-	FALSE	-	-	-	-			
Methylene bromide	FALSE	-	-	-	-			
Total Pathway Carcinogenic Risk =						1,9E-12		

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT							
TIER 2 PATHWAY RISK CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)							
Constituents of Concern	TOXIC EFFECTS			(6) Inhalation Reference Concentration (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)		
	(5) Maximum Toxicant Exposure (mg/m ³)				On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None				
Lead (inorganic) *	0.0E+0	NC	NC	-			
Benzo-a-pyrene	5.0E-12	NC	NC	-			
Benzo-g,h,i-perylene	2.7E-12	NC	NC	-			
Phenanthrene	1.6E-8	NC	NC	-			
Trichloroethane, 1,1,1-	1.4E-3	NC	NC	5.0E+0	2.9E-4		
Methylene bromide	2.4E-6	NC	NC	4.0E-3	5.9E-4		
Total Pathway Hazard Index =					8.8E-4		

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Equipamientos Interior
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208



RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
SURFACE SOILS (0.3 - 1 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
	Soil Conc. (mg/kg)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
Constituents of Concern									
Lead (inorganic) *	1,4E+2	Error							
Benzo-a-pyrene	2,8E-1	3,7E+7			7,6E-9				
Benzo-g,h,i-perylene	1,5E-1	7,7E+7			1,9E-9				
Phenanthrene	2,0E-1	4,8E+5			4,2E-7				
Trichloroethane, 1,1,1-	6,5E-1	5,6E+4			1,2E-5				
Methylene bromide	2,5E-2	5,6E+4			4,5E-7				

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS									
SURFACE SOILS (0.3 - 1 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)				
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Residential	Construction Worker	None	None	Residential	Construction Worker	None	None	
Constituents of Concern									
Lead (inorganic) *	3,5E-2								
Benzo-a-pyrene	3,5E-2				2,7E-10				
Benzo-g,h,i-perylene	8,2E-2				1,6E-10				
Phenanthrene	8,2E-2				3,4E-8				
Trichloroethane, 1,1,1-	8,2E-2				9,6E-7				
Methylene bromide	8,2E-2				3,7E-8				

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Lead (inorganic) *	1,4E+2	VF samb					
Benzo-a-pyrene	2,8E-1	3,1E+10			9,1E-12		
Benzo-g,h,i-perylene	1,5E-1	1,4E+11			1,1E-12		
Phenanthrene	2,0E-1	5,3E+6			3,8E-8		
Trichloroethane, 1,1,1-	6,5E-1	5,6E+4			1,2E-5		
Methylene bromide	2,5E-2	5,6E+4			4,5E-7		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

4 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m):						
VAPOR INHALATION (cont'd)						
Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Lead (inorganic) *	3,5E-2					
Benzo-a-pyrene	3,5E-2			3,2E-13		
Benzo-g,h,i-perylene	8,2E-2			9,1E-14		
Phenanthrene	8,2E-2			3,1E-9		
Trichloroethane, 1,1,1-	8,2E-2			9,6E-7		
Methylene bromide	8,2E-2			3,7E-8		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Lead (inorganic) *							
Benzo-a-pyrene							
Benzo-g,h,i-perylene							
Phenanthrene							
Trichloroethane, 1,1,1-							
Methylene bromide							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern	None	None	None	None	None	None
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Trichloroethane, 1,1,1-						
Methylene bromide						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None
Lead (inorganic) *				
Benzo-a-pyrene	2,7E-10			
Benzo-g,h,i-perylene	1,6E-10			
Phenanthrene	3,4E-8			
Trichloroethane, 1,1,1-	9,6E-7			
Methylene bromide	3,7E-8			

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

8 OF 9

TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		
		Residential	Construction Worker	None	None		Residential	Construction Worker	Off-site 1 (0 m)
Lead (inorganic) *	TRUE			-	-	1,2E-5			
Benzo-a-pyrene	TRUE	2,7E-10		-	-	8,8E-4	2,4E-10		
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-			
Phenanthrene	FALSE	-	-	-	-	-			
Trichloroethane, 1,1,1-	FALSE	-	-	-	-	-			
Methylene bromide	FALSE	-	-	-	-	-			
Total Pathway Carcinogenic Risk =							2,4E-10		

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes

Completed By: ITM
 Date Completed: 30-nov-yy

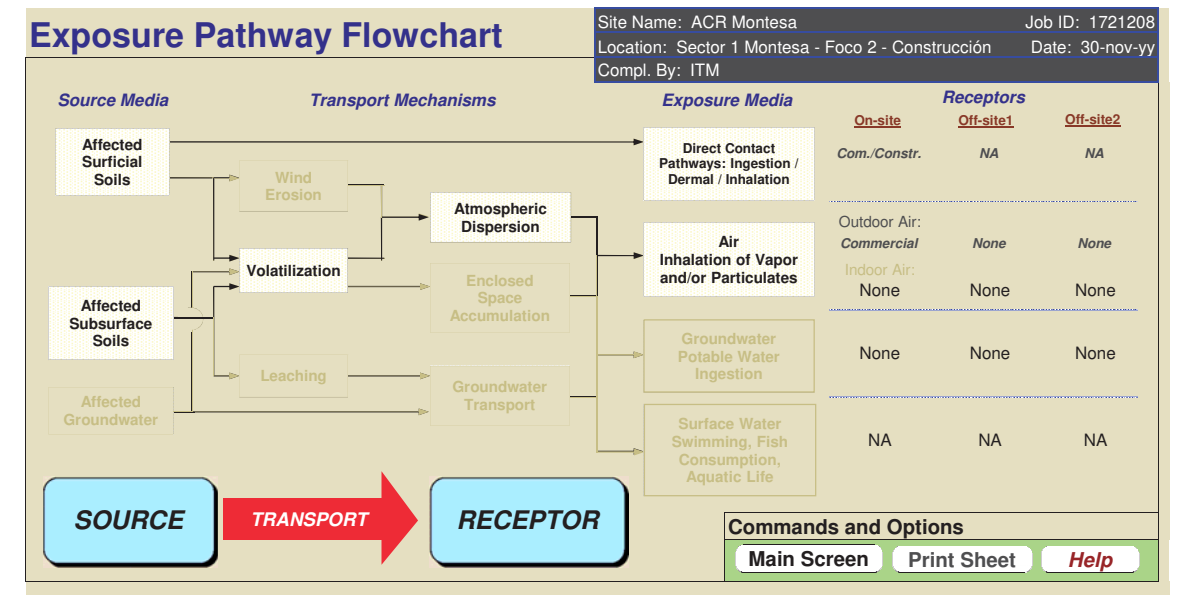
Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	Conc. (mg/m ³)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None		Residential	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
Benzo-a-pyrene	6,3E-10				-				
Benzo-g,h,i-perylene	1,6E-10				-				
Phenanthrene	3,4E-8				-				
Trichloroethane, 1,1,1-	9,6E-7				5,0E+0	1,9E-7			
Methylene bromide	3,7E-8				4,0E-3	9,2E-6			
Total Pathway Hazard Index =						9,4E-6			

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					1 OF 3	
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)						
Constituents of Concern	1) Source/Exposure Medium		2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)		Commercial	Construction Worker	Commercial	Construction Worker
Polychlorinated biphenyls (liquid)	1.7E+0		1.1E-6	6.3E-9	1.9E-6	1.1E-8

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
Site Location: Sector 1 Montesa - Foco 2 - Construcción Job ID: 1721208
Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION								2 OF 3	
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
		Commercial		Construction Worker				Commercial	Construction Worker
Polychlorinated biphenyls (liquid)	TRUE	3.0E-7	1.6E-6	2.9E-9	7.8E-9	2.0E+0	2.0E+0	3.8E-6	2.1E-8
Total Pathway Carcinogenic Risk =								3.8E-6	2.1E-8

* No dermal slope factor available - oral slope factor used.

Site Name: ACR Montesa Date Completed: 30-nov-yy
Site Location: Sector 1 Montesa - Foco 2 - Construcción Job ID: 1721208
Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION											
SOIL EXPOSURE PATHWAY 3 OF 3											
■ (Checked if Pathway is Complete)											
Constituents of Concern	TOXIC EFFECTS				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient				
	(5) Total Toxicant Intake Rate (mg/kg/day)				(a) Oral		(b) Dermal				
	(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(a) Oral	(b) Dermal	Commercial	Construction Worker			
Polychlorinated biphenyls (liquid)	8.3E-7	4.5E-6	2.0E-7	5.5E-7	2.0E-5	2.0E-5	2.7E-1	3.7E-2			
Total Pathway Hazard Index =								2.7E-1	3.7E-2		

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

* No dermal reference dose available--oral reference dose used.

RBCA SITE ASSESSMENT										
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS 1 OF 9										
■ (Checked if Pathway is Complete)										
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg)				3) Exposure Medium				
	Soil Conc. (mg/kg)	Receptor				Outdoor Air: POE Conc. (mg/m ³) (1) / (2)				
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	None	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	None	None
Polychlorinated biphenyls (liquid)	1.7E+0	9.3E+5				1.8E-6				

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Construcción
 Completed By: ITM

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Polychlorinated biphenyls (liquid)	2,4E-1				4,5E-7			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	None	None	Commercial	None	None
Polychlorinated biphenyls (liquid)	1,7E+0	2,0E+7			8,6E-8		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

4 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m):						
VAPOR INHALATION (cont'd)						
Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Polychlorinated biphenyls (liquid)	Commercial	None	None	Commercial	None	None
	2,4E-1			2,1E-8		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR							
INHALATION							
Constituents of Concern	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Polychlorinated biphenyls (liquid)		None	None	None	None	None	None

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED) _i (AT×365) _i (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Constituents of Concern	None	None	None	None	None
Polychlorinated biphenyls (liquid)						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Polychlorinated biphenyls (liquid)	4,5E-7			

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

8 OF 9

TIER 2 PATHWAY RISK CALCULATION											
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)											
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			Total Pathway Carcinogenic Risk =	
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)		Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None		None
Polychlorinated biphenyls (liquid)	TRUE	4,5E-7		-	-	5,7E-4	2,6E-7				
							2,6E-7				

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 2 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208

RBCA SITE ASSESSMENT

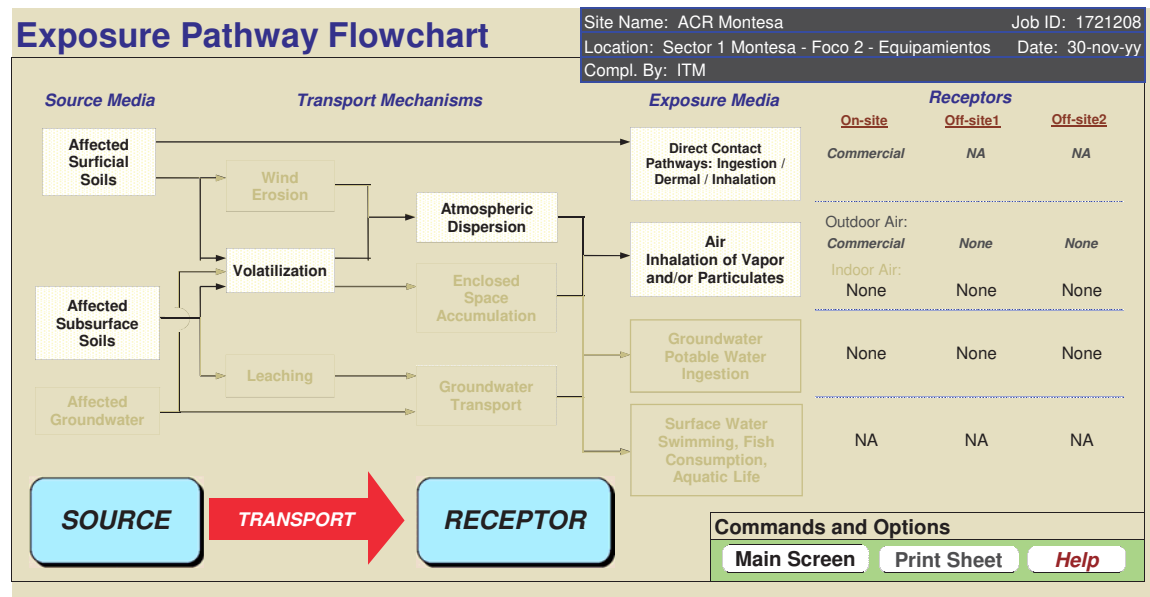
9 OF 9

TIER 2 PATHWAY RISK CALCULATION											
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)											
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)	(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				Total Pathway Hazard Index =				
			On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
			Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Polychlorinated biphenyls (liquid)	1,3E-6										

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 2 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

1 OF 3

SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)

SURFACE SOILS: ON SITE INGESTION, DERMAL EXPOSURE

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Polychlorinated biphenyls (liquid)	1.7E+0	2.7E-8		4.6E-8	-

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION										
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg-day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =
		Commercial		Construction Worker		(a) Oral	(b) Dermal	Commercial	Construction Worker	
		(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(2a)x(3a)	(2b)x(3b)	(2c)x(3a)	(2d)x(3b)	
Polychlorinated biphenyls (liquid)	TRUE	7.1E-9	3.9E-8			2.0E+0	2.0E+0	9.2E-8	-	9.2E-8
* No dermal slope factor available--oral slope factor used.										

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(5) Total Toxicant Intake Rate (mg/kg/day)				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient		Total Pathway Hazard Index =	
	Commercial		Construction Worker		(a) Oral	(b) Dermal	Commercial	Construction Worker		
	(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(5a)/(6a)	(5b)/(6b)	(5c)/(6a)	(5d)/(6b)		
Polychlorinated biphenyls (liquid)	2.0E-8	1.1E-7			2.0E-5	2.0E-5	6.4E-3		6.4E-3	
* No dermal reference dose available--oral reference dose used.										

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
SURFACE SOILS (0 - 1 m):									
VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)				
	Soil Conc. (mg/kg)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Polychlorinated biphenyls (liquid)	1,7E+0	9,3E+5				1,8E-6			

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)								
SURFACE SOILS (0 - 1 m):								
VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)				
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
Constituents of Concern	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Polychlorinated biphenyls (liquid)	5,9E-3				1,1E-8			

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg)			3) Exposure Medium		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
		Commercial	None	None	Commercial	None	None
Polychlorinated biphenyls (liquid)	1.7E+0						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

4 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1 m):						
VAPOR INHALATION (cont'd)						
Constituents of Concern	4) Exposure Multiplier			5) Average Inhalation Exposure		
	(EFxED)/(ATx365) (unitless)			Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Polychlorinated biphenyls (liquid)						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern		None	None	None	None	None	None
Polychlorinated biphenyls (liquid)							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Constituents of Concern	None	None	None	None	None
Polychlorinated biphenyls (liquid)						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Polychlorinated biphenyls (liquid)	1,1E-8			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

8 OF 9

TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None
Polychlorinated biphenyls (liquid)	TRUE	1,1E-8		-	-	5,7E-4	6,1E-9		
Total Pathway Carcinogenic Risk =							6,1E-9		

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 2 - Equipamientos

Completed By: ITM
 Date Completed: 30-nov-yy

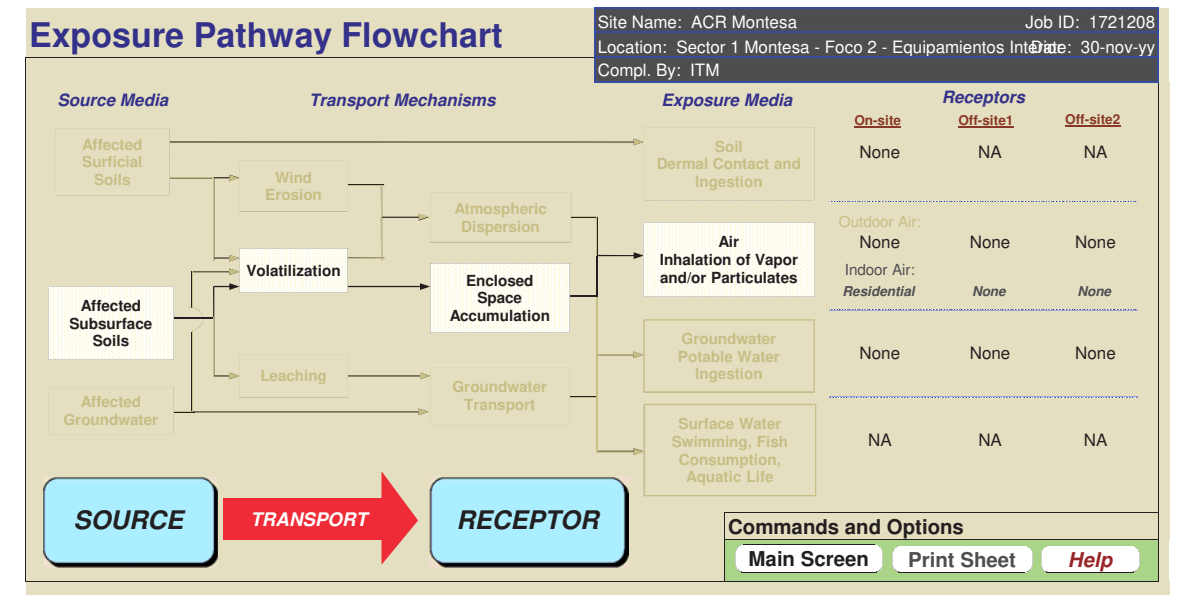
Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)			(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			TOXIC EFFECTS	
	On-site (0 m)		Off-site 1 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Commercial	Construction Worker	None		Commercial	Construction Worker	None	None	None
Polychlorinated biphenyls (liquid)	3.0E-8			-					
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 2 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



RBCA SITE ASSESSMENT					
					1 OF 8
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)					
SOILS (0 - 1 m): VAPOR					
INTRUSION INTO BUILDINGS	1) Source Medium	2) NAF Value (L/kg) Receptor	3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)	5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)
	On-site (0 m)	On-site (0 m)	On-site (0 m)	On-site (0 m)	On-site (0 m)
Constituents of Concern	Soil Conc. (mg/kg)	Residential	Residential	Residential	Residential
Polychlorinated biphenyls (liquid)	1,7E+0	1,6E+7	1,1E-7	1,5E-1	1,6E-8
* = Chemical with user-specified data					
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure					
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM			Date Completed: 30-nov-yy Job ID: 1721208		

RBCA SITE ASSESSMENT						
						2 OF 8
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INTRUSION						
INTO BUILDINGS	1) Source Medium	2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m) / Off-site 2 (0 m)
Constituents of Concern		None	None	None	None	None
Polychlorinated biphenyls (liquid)						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208		

RBCA SITE ASSESSMENT								
						3 OF 8		
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
INDOOR AIR EXPOSURE PATHWAYS								
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS								
			4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
			On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)			
			None	None	None			
Constituents of Concern								
Polychlorinated biphenyls (liquid)								
* = Chemical with user-specified data								
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure								
Site Name: AGR Montesa			Date Completed: 30-nov-yy					
Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior			Job ID: 1721208					
Completed By: ITM								

RBCA SITE ASSESSMENT							
						4 OF 8	
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS							
		Exposure Concentration					
1) Source Medium	2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)			
		None	None	None			
Soil Conc. (mg/kg)	1,7E+0						
Constituents of Concern							
Polychlorinated biphenyls (liquid)							
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: AGR Montesa			Date Completed: 30-nov-yy				
Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior			Job ID: 1721208				
Completed By: ITM							

RBCA SITE ASSESSMENT						
5 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS						
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS						
Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Polychlorinated biphenyls (liquid) * = Chemical with user-specified data	None	None	None	None	None	None
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: AGR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM			Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT			
6 OF 8			
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION			
INDOOR AIR EXPOSURE PATHWAYS			
MAXIMUM PATHWAY EXPOSURE (mg/m ³) (Maximum average exposure concentration from soil and groundwater routes)			
Constituents of Concern	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Polychlorinated biphenyls (liquid)	Residential 1,6E-8	None
Site Name: AGR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM		Date Completed: 30-nov-yy Job ID: 1721208	

RBCA SITE ASSESSMENT									
7 OF 8									
TIER 2 PATHWAY RISK CALCULATION									
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
CARCINOGENIC RISK									
(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m ³)			(3) Inhalation Unit Risk Factor <small>(µg/m³)⁻¹</small>	(4) Individual COC Risk (2) x (3) x 1000				
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		
Constituents of Concern	Residential	None	None	(µg/m ³) ⁻¹	Residential	None	None		
Polychlorinated biphenyls (liquid)	TRUE	1,6E-8	-	-	5,7E-4	9,0E-9			
Total Pathway Carcinogenic Risk =							9,0E-9		
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM					Date Completed: 30-nov-yy Job ID: 1721208				

RBCA SITE ASSESSMENT									
8 OF 8									
TIER 2 PATHWAY RISK CALCULATION									
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
TOXIC EFFECTS									
(1) Carcinogenic Classification	(5) Maximum Toxicant Exposure (mg/m ³)			(6) Inhalation Reference Concentration <small>(mg/m³)</small>	(7) Individual COC Hazard Quotient (5) / (6)				
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		
Constituents of Concern	Residential	None	None	(mg/m ³)	Residential	None	None		
Polychlorinated biphenyls (liquid)	3,7E-8	NC	NC	-	Residential	None	None		
Total Pathway Hazard Index =									
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM					Date Completed: 30-nov-yy Job ID: 1721208				

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

SURFACE SOILS (0.3 - 1 m):

VAPOR INHALATION

Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
TPH - Aliph >C21-C34	6,8E+1	5,6E+4				1,2E-3			
TPH - Arom >C21-C35	1,6E+2	2,4E+6				6,8E-5			
Di-n-butyl phthalate	1,6E-1	6,1E+6				2,6E-8			

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
Completed By: ITM

Date Completed: 30-nov-yy
Job ID: 1721208

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS

SURFACE SOILS (0.3 - 1 m):

VAPOR INHALATION (cont'd)

Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
TPH - Aliph >C21-C34	8,2E-2				1,0E-4			
TPH - Arom >C21-C35	8,2E-2				5,5E-6			
Di-n-butyl phthalate	8,2E-2				2,2E-9			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes
Completed By: ITM

Date Completed: 30-nov-yy
Job ID: 1721208

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Constituents of Concern						
TPH - Aliph >C21-C34	6,8E+1	5,9E+4			1,2E-3		
TPH - Arom >C21-C35	1,6E+2	1,3E+8			1,2E-6		
Di-n-butyl phthalate	1,6E-1	8,5E+8			1,9E-10		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Constituents of Concern					
TPH - Aliph >C21-C34	8,2E-2			9,5E-5		
TPH - Arom >C21-C35	8,2E-2			1,0E-7		
Di-n-butyl phthalate	8,2E-2			1,5E-11		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Di-n-butyl phthalate							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Constituents of Concern	None	None	None	None	None
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Di-n-butyl phthalate						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None
TPH - Aliph >C21-C34	1.0E-4			
TPH - Arom >C21-C35	5.5E-6			
Di-n-butyl phthalate	2.2E-9			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		
		Residential	Construction Worker	None	None		Residential	Construction Worker	Off-site 1 (0 m)
TPH - Aliph >C21-C34	FALSE	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-				
Di-n-butyl phthalate	FALSE	-	-	-	-				
Total Pathway Carcinogenic Risk =									

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes

Completed By: ITM
 Date Completed: 30-nov-yy

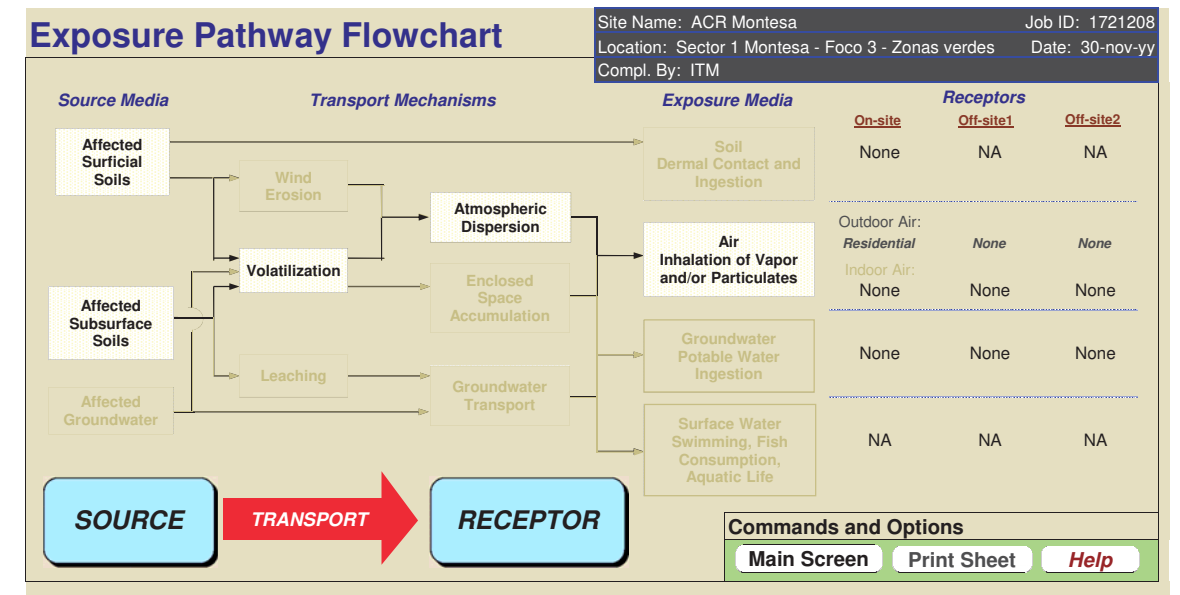
Job ID: 1721208

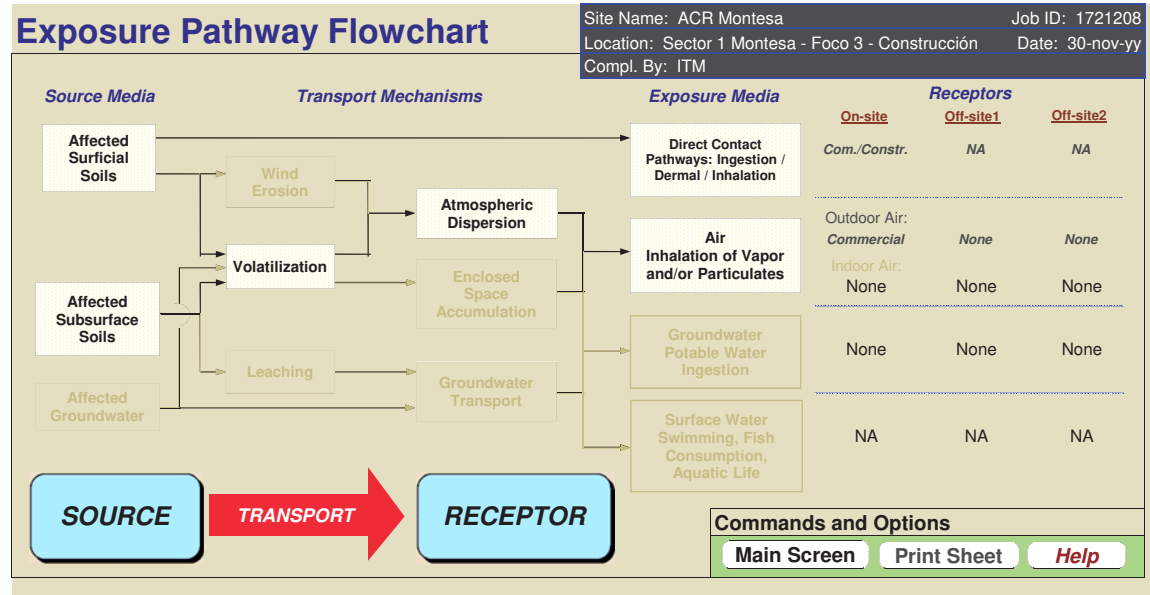
RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None		Residential	Construction Worker	None	None
TPH - Aliph >C21-C34	1,0E-4				-				
TPH - Arom >C21-C35	5,5E-6				-				
Di-n-butyl phthalate	2,2E-9				-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 3 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208





TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

1 OF 3

SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)

SURFACE SOILS: ON SITE INGESTION, DERMAL EXPOSURE

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
TPH - Aliph >C21-C34	6.8E+1	3.6E-6	4.9E-7	2.4E-4	3.3E-5
TPH - Arom >C21-C35	1.6E+2	2.7E-6	3.9E-7	4.4E-4	6.2E-5
Di-n-butyl phthalate	1.6E-1	2.0E-6	3.0E-7	3.3E-7	4.8E-8

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 3 - Construcción Date Completed: 30-nov-yy
 Completed By: ITM Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =
		(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b) (2c)x(3a) + (2d)x(3b)		
		Commercial	Construction Worker	Commercial	Construction Worker					
TPH - Aliph >C21-C34	FALSE			Missing Sfo	Tox?	-	-			
TPH - Arom >C21-C35	FALSE			Missing Sfo	Tox?	-	-			
Di-n-butyl phthalate	FALSE			Missing Sfo	Tox?	-	-			

* No dermal slope factor available--oral slope factor used.

Total Pathway Carcinogenic Risk =

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =
		(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b) (2c)x(3a) + (2d)x(3b)		
		Commercial	Construction Worker	Commercial	Construction Worker					
TPH - Aliph >C21-C34	FALSE			Missing Sfo	Tox?	-	-			
TPH - Arom >C21-C35	FALSE			Missing Sfo	Tox?	-	-			
Di-n-butyl phthalate	FALSE			Missing Sfo	Tox?	-	-			

* No dermal reference dose available--oral reference dose used.

Total Pathway Hazard Index =

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

SURFACE SOILS (0 - 1 m):

VAPOR INHALATION

Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
TPH - Aliph >C21-C34	6,8E+1	5,1E+4				1,3E-3			
TPH - Arom >C21-C35	1,6E+2	2,4E+6				6,8E-5			
Di-n-butyl phthalate	1,6E-1	6,1E+6				2,6E-8			

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 3 - Construcción
Completed By: ITM

Date Completed: 30-nov-yy
Job ID: 1721208

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS

SURFACE SOILS (0 - 1 m):

VAPOR INHALATION (cont'd)

Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
TPH - Aliph >C21-C34	6,8E-1				9,2E-4			
TPH - Arom >C21-C35	6,8E-1				4,6E-5			
Di-n-butyl phthalate	6,8E-1				1,8E-8			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 3 - Construcción
Completed By: ITM

Date Completed: 30-nov-yy
Job ID: 1721208

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Constituents of Concern						
TPH - Aliph >C21-C34	6,8E+1	5,9E+4			1,2E-3		
TPH - Arom >C21-C35	1,6E+2	1,3E+8			1,2E-6		
Di-n-butyl phthalate	1,6E-1	8,5E+8			1,9E-10		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Constituents of Concern					
TPH - Aliph >C21-C34	6,8E-1			7,9E-4		
TPH - Arom >C21-C35	6,8E-1			8,5E-7		
Di-n-butyl phthalate	6,8E-1			1,3E-10		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Di-n-butyl phthalate							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Constituents of Concern	None	None	None	None	None
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Di-n-butyl phthalate						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
TPH - Aliph >C21-C34	9.2E-4			
TPH - Arom >C21-C35	4.6E-5			
Di-n-butyl phthalate	1.8E-8			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION												
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)												
Constituents of Concern	(1) Is Carcinogenic	CARCINOGENIC RISK						(4) Individual COC Risk (2) x (3) x 1000				
		(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	On-site (0 m)			Off-site 1 (0 m)	Off-site 2 (0 m)	
		Commercial	Construction Worker	None	None		Commercial			Construction Worker	None	None
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-						
TPH - Arom >C21-C35	FALSE	-	-	-	-	-						
Di-n-butyl phthalate	FALSE	-	-	-	-	-						
Total Pathway Carcinogenic Risk =												

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Construcción

Completed By: ITM
 Date Completed: 30-nov-yy

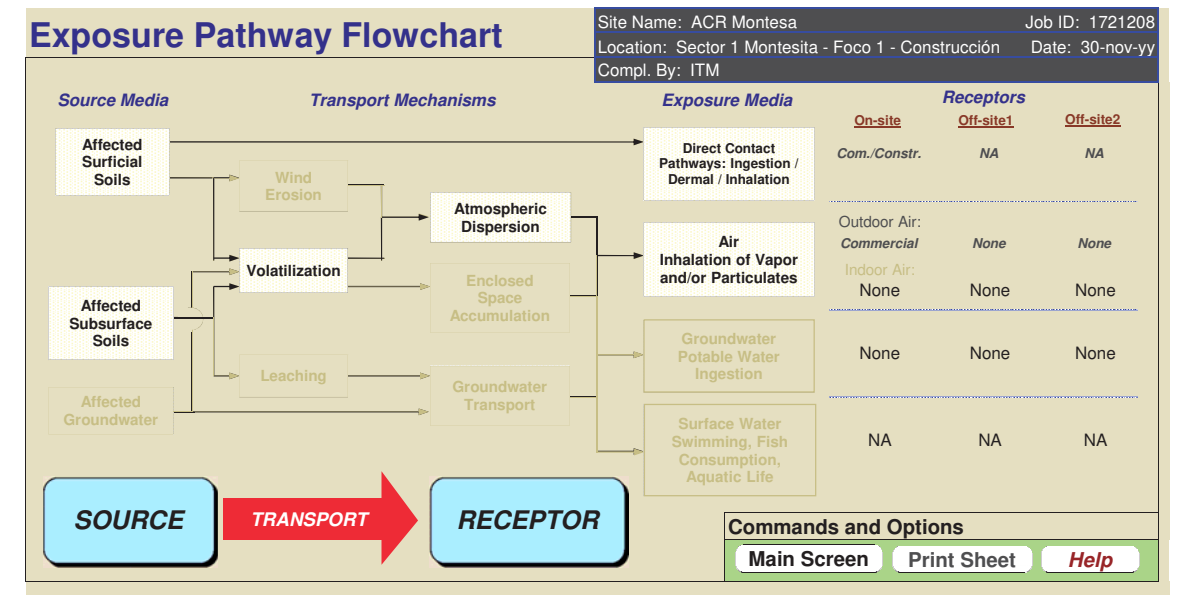
Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
TPH - Aliph >C21-C34	9,2E-4				-				
TPH - Arom >C21-C35	4,6E-5				-				
Di-n-butyl phthalate	1,8E-8				-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 3 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)						
Constituents of Concern	1) Source/Exposure Medium		2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker	
TPH - Aliph >C21-C34	1,5E+4	3,6E-6	4,9E-7	5,4E-2	7,3E-3	
TPH - Arom >C21-C35	4,9E+3	2,7E-6	3,9E-7	1,3E-2	1,9E-3	
Di-n-butyl phthalate	2,3E+1	2,0E-6	3,0E-7	4,7E-7	7,0E-8	
TPH - Aliph >C10-C12	3,6E+0	3,6E-6	4,9E-7	1,3E-5	1,8E-6	
TPH - Aliph >C12-C16	3,3E+1	3,6E-6	4,9E-7	1,2E-4	1,6E-5	
TPH - Aliph >C16-C21	4,8E+2	3,6E-6	4,9E-7	1,7E-3	2,3E-4	
TPH - Arom >C16-C21	6,8E+1	2,7E-6	3,9E-7	1,9E-4	2,6E-5	
Bis (2-ethyl-hexyl) phthalate	5,5E+0	3,1E-6	1,6E-8	1,7E-5	8,6E-8	

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)
Site Name: ACR Montesa Date Completed: 30-nov-yy Job ID: 1721208
Site Location: Sector 1 Montesa - Foco 1 - Construcción
Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
		Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker
TPH - Aliph >C21-C34	FALSE			Missing Sfo	Tox?	-	-		
TPH - Arom >C21-C35	FALSE			Missing Sfo	Tox?	-	-		
Di-n-butyl phthalate	FALSE			Missing Sfo	Tox?	-	-		
TPH - Aliph >C10-C12	FALSE			Missing Sfo	Tox?	-	-		
TPH - Aliph >C12-C16	FALSE			Missing Sfo	Tox?	-	-		
TPH - Aliph >C16-C21	FALSE			Missing Sfo	Tox?	-	-		
TPH - Arom >C16-C21	FALSE			Missing Sfo	Tox?	-	-		
Bis (2-ethyl-hexyl) phthalate	TRUE	9,6E-7	1,6E-5	9,2E-9	7,7E-8	1,4E-2	1,4E-2	2,4E-7	1,2E-9

* No dermal slope factor available—oral slope factor used.

Total Pathway Carcinogenic Risk = **2,4E-7** **1,2E-9**

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 1 - Construcción
Completed By: ITM

Date Completed: 30-nov-yy
Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION 3 OF 3								
SOIL EXPOSURE PATHWAY ■ (Checked if Pathway is Complete)								
Constituents of Concern	TOXIC EFFECTS				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient	
	(5) Total Toxicant Intake Rate (mg/kg/day)				(a) Oral		(b) Dermal	
	(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b)	(5c)/(6a) + (5d)/(6b)
	Commercial		Construction Worker				Commercial	Construction Worker
TPH - Aliph >C21-C34	7.3E-3	4.6E-2	1.8E-3	5.6E-3	1.6E+0	1.6E+0	3.4E-2	4.6E-3
TPH - Arom >C21-C35	2.4E-3	1.1E-2	5.8E-4	1.3E-3	3.0E-2	3.0E-2	4.5E-1	6.3E-2
Di-n-butyl phthalate	1.1E-7	3.6E-7	2.7E-8	4.3E-8	1.0E-1	1.0E-1	4.7E-6	7.0E-7
TPH - Aliph >C10-C12	1.8E-6	1.1E-5	4.2E-7	1.3E-6	1.0E-1	1.0E-1	1.3E-4	1.8E-5
TPH - Aliph >C12-C16	1.6E-5	1.0E-4	3.9E-6	1.2E-5	1.0E-1	1.0E-1	1.2E-3	1.6E-4
TPH - Aliph >C16-C21	2.3E-4	1.5E-3	5.6E-5	1.8E-4	2.0E+0	2.0E+0	8.6E-4	1.2E-4
TPH - Arom >C16-C21	3.3E-5	1.5E-4	8.0E-6	1.8E-5	3.0E-2	3.0E-2	6.2E-3	8.8E-4
Bis (2-ethyl-hexyl) phthalate	2.7E-6	4.5E-5	6.5E-7	5.4E-6	2.0E-2	2.0E-2	2.4E-3	3.0E-4
* No dermal reference dose available--oral reference dose used.								
Total Pathway Hazard Index =					4.9E-1		6.9E-2	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT 1 OF 9								
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)								
SURFACE SOILS (0 - 1 m):								
VAPOR INHALATION								
Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None
TPH - Aliph >C21-C34	1.5E+4	5.1E+4				3.0E-1		
TPH - Arom >C21-C35	4.9E+3	2.4E+6				2.1E-3		
Di-n-butyl phthalate	2.3E-1	6.1E+6				3.8E-8		
TPH - Aliph >C10-C12	3.6E+0	4.3E+4				8.4E-5		
TPH - Aliph >C12-C16	3.3E+1	4.3E+4				7.7E-4		
TPH - Aliph >C16-C21	4.8E+2	6.2E+4				7.8E-3		
TPH - Arom >C16-C21	6.8E+1	1.9E+5				3.6E-4		
Bis (2-ethyl-hexyl) phthalate	5.5E+0	1.1E+7				4.9E-7		

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
SURFACE SOILS (0 - 1 m):								
VAPOR INHALATION (cont'd)								
Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (d) X (e)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
TPH - Aliph >C21-C34	6,8E-1				2,0E-1			
TPH - Arom >C21-C35	6,8E-1				1,4E-3			
Di-n-butyl phthalate	6,8E-1				2,6E-8			
TPH - Aliph >C10-C12	6,8E-1				5,8E-5			
TPH - Aliph >C12-C16	6,8E-1				5,3E-4			
TPH - Aliph >C16-C21	6,8E-1				5,3E-3			
TPH - Arom >C16-C21	6,8E-1				2,5E-4			
Bis (2-ethyl-hexyl) phthalate	6,8E-1				3,4E-7			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg)			3) Exposure Medium		
	Soil Conc. (mg/kg)	Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None	
TPH - Aliph >C21-C34	1,5E+4	5,9E+4			2,6E-1		
TPH - Arom >C21-C35	4,9E+3	1,3E+8			3,8E-5		
Di-n-butyl phthalate	2,3E-1	8,5E+8			2,7E-10		
TPH - Aliph >C10-C12	3,6E+0	4,3E+4			8,4E-5		
TPH - Aliph >C12-C16	3,3E+1	4,3E+4			7,7E-4		
TPH - Aliph >C16-C21	4,8E+2	8,7E+4			5,5E-3		
TPH - Arom >C16-C21	6,8E+1	8,1E+5			8,4E-5		
Bis (2-ethyl-hexyl) phthalate	5,5E+0	2,9E+9			1,9E-9		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
TPH - Aliph >C21-C34	6,8E-1			1,8E-1		
TPH - Arom >C21-C35	6,8E-1			2,6E-5		
Di-n-butyl phthalate	6,8E-1			1,8E-10		
TPH - Aliph >C10-C12	6,8E-1			5,8E-5		
TPH - Aliph >C12-C16	6,8E-1			5,3E-4		
TPH - Aliph >C16-C21	6,8E-1			3,8E-3		
TPH - Arom >C16-C21	6,8E-1			5,8E-5		
Bis (2-ethyl-hexyl) phthalate	6,8E-1			1,3E-9		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium		
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)	
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)
Constituents of Concern						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Di-n-butyl phthalate						
TPH - Aliph >C10-C12						
TPH - Aliph >C12-C16						
TPH - Aliph >C16-C21						
TPH - Arom >C16-C21						
Bis (2-ethyl-hexyl) phthalate						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Di-n-butyl phthalate						
TPH - Aliph >C10-C12						
TPH - Aliph >C12-C16						
TPH - Aliph >C16-C21						
TPH - Arom >C16-C21						
Bis (2-ethyl-hexyl) phthalate						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
TPH - Aliph >C21-C34	2,0E-1			
TPH - Arom >C21-C35	1,4E-3			
Di-n-butyl phthalate	2,6E-8			
TPH - Aliph >C10-C12	5,8E-5			
TPH - Aliph >C12-C16	5,3E-4			
TPH - Aliph >C16-C21	5,3E-3			
TPH - Arom >C16-C21	2,5E-4			
Bis (2-ethyl-hexyl) phthalate	3,4E-7			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

8 OF 9

TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Di-n-butyl phthalate	FALSE	-	-	-	-	-				
TPH - Aliph >C10-C12	FALSE	-	-	-	-	-				
TPH - Aliph >C12-C16	FALSE	-	-	-	-	-				
TPH - Aliph >C16-C21	FALSE	-	-	-	-	-				
TPH - Arom >C16-C21	FALSE	-	-	-	-	-				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =										

Site Name: ACR Montesa
Site Location: Sector 1 Montesita - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208

RBCA SITE ASSESSMENT

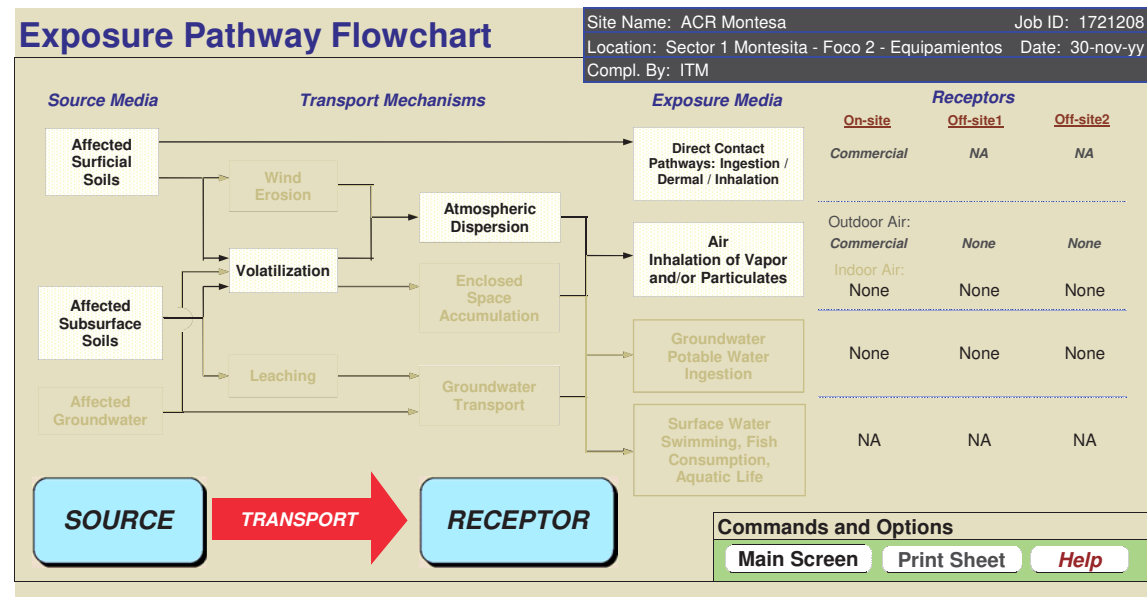
9 OF 9

TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
TPH - Aliph >C21-C34	2,0E-1				-				
TPH - Arom >C21-C35	1,4E-3				-				
Di-n-butyl phthalate	2,6E-8				-				
TPH - Aliph >C10-C12	5,8E-5				5,0E-1	1,2E-4			
TPH - Aliph >C12-C16	5,3E-4				5,0E-1	1,1E-3			
TPH - Aliph >C16-C21	5,3E-3				-				
TPH - Arom >C16-C21	2,5E-4				-				
Bis (2-ethyl-hexyl) phthalate	3,4E-7				-				
Total Pathway Hazard Index =									

Site Name: ACR Montesa
Site Location: Sector 1 Montesita - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

1 OF 3

SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)

SURFACE SOILS: ON SITE INGESTION, DERMAL EXPOSURE

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Antimony	3,1E+1	3,6E-8		1,1E-6	-
Copper	2,9E+3	1,8E-8		5,3E-5	-
Lead (inorganic) *	3,0E+2	2,9E-8		8,7E-6	-
Molybdenum	1,4E+1	2,2E-8		3,0E-7	-
Zinc	4,2E+3	3,0E-8		1,3E-4	-

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Date Completed: 30-nov-yy
 Completed By: ITM Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =
		(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b) (2c)x(3a) + (2d)x(3b)		
		Commercial	Construction Worker	Commercial	Construction Worker					
Antimony	FALSE					-	-			
Copper	FALSE					-	-			
Lead (inorganic) *	TRUE	1.3E-6	2.7E-6			8.5E-3	-	3.3E-8		
Molybdenum	FALSE					-	-			
Zinc	FALSE					-	-			

* No dermal slope factor available—oral slope factor used.

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Total Toxicant Intake Rate (mg/kg/day)				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient		Total Pathway Hazard Index =
	(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b) (5c)/(6a) + (5d)/(6b)		
	Commercial	Construction Worker	Commercial	Construction Worker					
Antimony	3.6E-7	7.7E-7			4.0E-4	4.0E-4	2.8E-3		
Copper	3.4E-5	1.9E-5			4.0E-2	4.0E-2	1.3E-3		
Lead (inorganic) *	Tox?	Tox?			-	-			
Molybdenum	1.6E-7	1.4E-7			5.0E-3	5.0E-3	6.0E-5		
Zinc	4.9E-5	7.8E-5			3.0E-1	3.0E-1	4.2E-4		

* No dermal reference dose available—oral reference dose used.

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)									
SURFACE SOILS (0 - 1 m):									
VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
	Soil Conc. (mg/kg)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Constituents of Concern									
Antimony	3.1E+1	Error							
Copper	2.9E+3	Error							
Lead (inorganic) *	3.0E+2	Error							
Molybdenum	1.4E+1	Error							
Zinc	4.2E+3	Error							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS									
SURFACE SOILS (0 - 1 m):									
VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)				
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None	
Constituents of Concern									
Antimony	1.6E-2								
Copper	1.6E-2								
Lead (inorganic) *	5.9E-3								
Molybdenum	1.6E-2								
Zinc	1.6E-2								

* = Chemical with user-specified data
 NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Antimony	3,1E+1						
Copper	2,9E+3						
Lead (inorganic) *	3,0E+2						
Molybdenum	1,4E+1						
Zinc	4,2E+3						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

4 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1 m):						
VAPOR INHALATION (cont'd)						
Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Antimony						
Copper						
Lead (inorganic) *						
Molybdenum						
Zinc						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Antimony							
Copper							
Lead (inorganic) *							
Molybdenum							
Zinc							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern	None	None	None	None	None	None
Antimony						
Copper						
Lead (inorganic) *						
Molybdenum						
Zinc						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Antimony				
Copper				
Lead (inorganic) *				
Molybdenum				
Zinc				

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

8 OF 9

TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Antimony	FALSE	-	-	-	-					
Copper	FALSE	-	-	-	-					
Lead (inorganic) *	TRUE	-	-	-	1.2E-5					
Molybdenum	FALSE	-	-	-	-					
Zinc	FALSE	-	-	-	-					
Total Pathway Carcinogenic Risk = <input type="text"/>										

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Equipamientos

Completed By: ITM
 Date Completed: 30-nov-yy

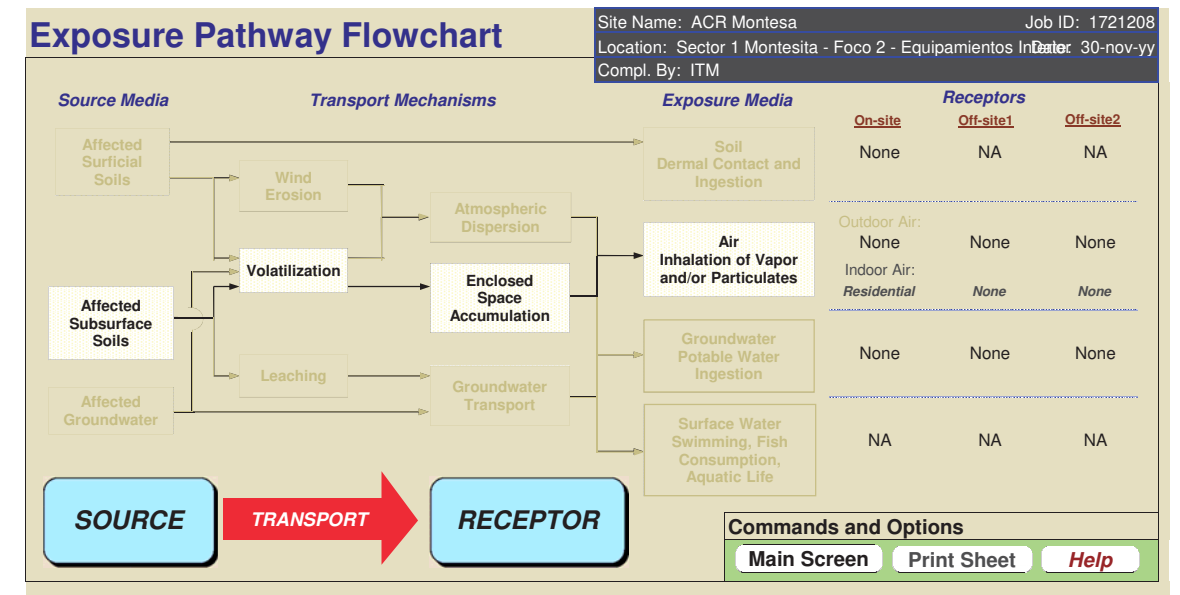
Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Antimony					-				
Copper					-				
Lead (inorganic) *	0.0E+0				-				
Molybdenum					-				
Zinc					-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 2 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



RBCA SITE ASSESSMENT					
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)					
SOILS (0 - 1 m): VAPOR					
INTRUSION INTO BUILDINGS	1) Source Medium	2) NAF Value (L/kg) Receptor	3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless) On-site (0 m)	5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4) On-site (0 m)
		On-site (0 m)	On-site (0 m)	On-site (0 m)	On-site (0 m)
Constituents of Concern	Soil Conc. (mg/kg)	Residential	Residential	Residential	Residential
Antimony	3.1E+1	zero VF		3.4E-1	
Copper	2.9E+3	zero VF		3.4E-1	
Lead (inorganic) *	3.0E+2	zero VF		1.5E-1	
Molybdenum	1.4E+1	zero VF		3.4E-1	
Zinc	4.2E+3	zero VF		3.4E-1	
* = Chemical with user-specified data					
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure					
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM			Date Completed: 30-nov-yy Job ID: 1721208		

RBCA SITE ASSESSMENT							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INTRUSION							
INTRUSION INTO BUILDINGS	1) Source Medium	2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	Groundwater Conc. (mg/L)	None	None	None	None	None	None
Antimony							
Copper							
Lead (inorganic) *							
Molybdenum							
Zinc							
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT						
3 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS						
	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None
Antimony						
Copper						
Lead (inorganic) *						
Molybdenum						
Zinc						
* = Chemical with user-specified data						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM			Date Completed: 30-nov-yy Job ID: 1721208			

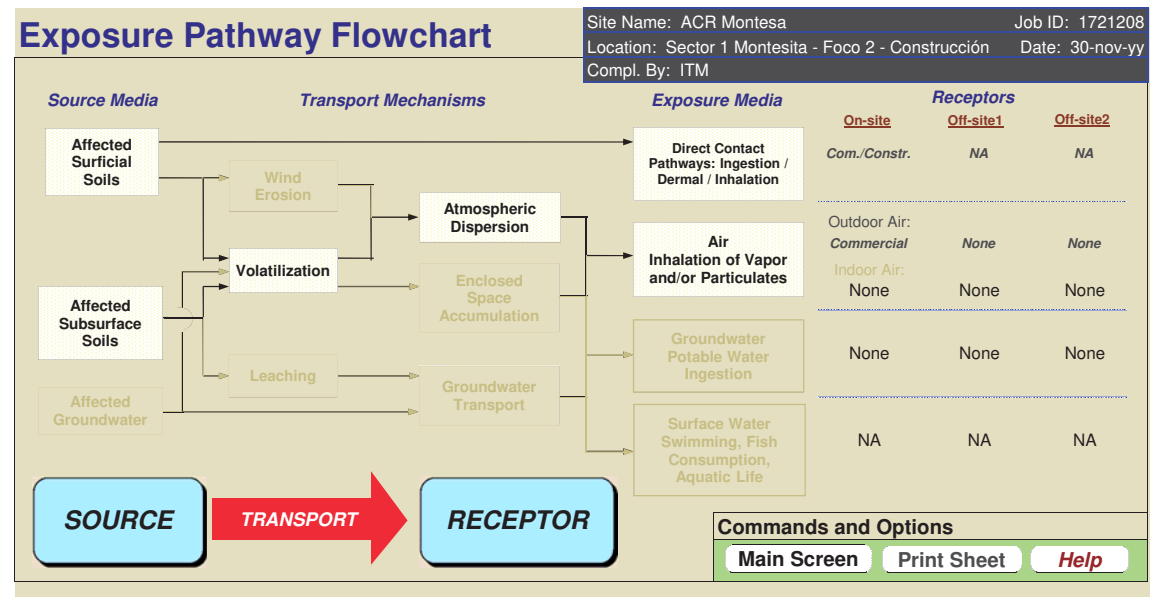
RBCA SITE ASSESSMENT						
4 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)						
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS						
	Exposure Concentration		2) NAF Value (m ³ /L)		3) Exposure Medium	
	1) Source Medium	Receptor			Indoor Air: POE Conc. (mg/m ³) (1) / (2)	
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)
Constituents of Concern	Soil Conc. (mg/kg)	None	None	None	None	None
Antimony	3,1E+1					
Copper	2,8E+3					
Lead (inorganic) *	3,0E+2					
Molybdenum	1,4E+1					
Zinc	4,2E+3					
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM			Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT						
5 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS						
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS						
	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None
Antimony						
Copper						
Lead (inorganic) *						
Molybdenum						
Zinc						
* = Chemical with user-specified data						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM			Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT			
6 OF 8			
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION			
INDOOR AIR EXPOSURE PATHWAYS			
MAXIMUM PATHWAY EXPOSURE (mg/m ³) (Maximum average exposure concentration from soil and groundwater routes)			
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	None	None
Constituents of Concern			
Antimony			
Copper			
Lead (inorganic) *			
Molybdenum			
Zinc			
Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Equipamientos Interior Completed By: ITM			
		Date Completed: 30-nov-yy Job ID: 1721208	

RBCA SITE ASSESSMENT									
7 OF 8									
TIER 2 PATHWAY RISK CALCULATION									
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m ³)			(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	
		Residential	None	None		Residential	None	None	
Antimony	FALSE	-	-	-	-				
Copper	FALSE	-	-	-	-				
Lead (inorganic) *	TRUE	-	-	-	1,2E-5				
Molybdenum	FALSE	-	-	-	-				
Zinc	FALSE	-	-	-	-				
Total Pathway Carcinogenic Risk = <input style="width: 50px;" type="text"/>									
Site Name: ACR Montesa Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Interior Completed By: ITM					Date Completed: 30-nov-yy Job ID: 1721208				

RBCA SITE ASSESSMENT									
8 OF 8									
TIER 2 PATHWAY RISK CALCULATION									
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m ³)			(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	
		Residential	None	None		Residential	None	None	
Antimony	FALSE	-	-	-	-				
Copper	FALSE	-	-	-	-				
Lead (inorganic) *	TRUE	-	-	-	1,2E-5				
Molybdenum	FALSE	-	-	-	-				
Zinc	FALSE	-	-	-	-				
Total Pathway Carcinogenic Risk = <input style="width: 50px;" type="text"/>									
Site Name: ACR Montesa Site Location: Sector 1 Montesita - Foco 2 - Equipamientos Interior Completed By: ITM					Date Completed: 30-nov-yy Job ID: 1721208				



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

1 OF 3

SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)

SURFACE SOILS: ON SITE INGESTION, DERMAL EXPOSURE

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Antimony	3,1E+1	1,5E-6	2,4E-7	4,7E-5	7,5E-6
Copper	2,9E+3	7,6E-7	1,5E-7	2,2E-3	4,3E-4
Lead (inorganic) *	3,0E+2	1,2E-6	1,3E-7	3,6E-4	3,8E-5
Molybdenum	1,4E+1	9,0E-7	1,7E-7	1,3E-5	2,3E-6
Zinc	4,2E+3	1,3E-6	2,1E-7	5,3E-3	8,8E-4

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Site Location: Sector 1 Montesa - Foco 2 - Construcción Date Completed: 30-nov-yy
 Completed By: ITM Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										2 OF 3
SOIL EXPOSURE PATHWAY										(Checked if Pathway is Complete)
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =
		(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b) (2c)x(3a) + (2d)x(3b)		
		Commercial	Construction Worker	Commercial	Construction Worker					
Antimony	FALSE		Missing Sfo	Tox?	-	-				
Copper	FALSE		Missing Sfo	Tox?	-	-				
Lead (inorganic) *	TRUE	5.2E-5	1.1E-4	5.0E-7	5.3E-7	8.5E-3	1.4E-6	8.8E-9		
Molybdenum	FALSE		Missing Sfo	Tox?	-	-				
Zinc	FALSE		Missing Sfo	Tox?	-	-				

* No dermal slope factor available--oral slope factor used.

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										3 OF 3		
SOIL EXPOSURE PATHWAY										(Checked if Pathway is Complete)		
Constituents of Concern	(5) Total Toxicant Intake Rate (mg/kg/day)								(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient	
	(a) via Ingestion		(b) via Dermal Contact		(c) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b)	(5c)/(6a) + (5d)/(6b)
	Commercial	Construction Worker	Commercial	Construction Worker								
Antimony	1.5E-5	3.2E-5	3.6E-6	3.8E-6	4.0E-4	4.0E-4	1.2E-1	1.9E-2				
Copper	1.4E-3	7.9E-4	3.4E-4	9.4E-5	4.0E-2	4.0E-2	5.5E-2	1.1E-2				
Lead (inorganic) *	Tox?	Tox?	Missing Rfdo	Missing RfDd	-	-						
Molybdenum	6.8E-6	5.7E-6	1.6E-6	6.8E-7	5.0E-3	5.0E-3	2.5E-3	4.7E-4				
Zinc	2.1E-3	3.2E-3	4.9E-4	3.9E-4	3.0E-1	3.0E-1	1.8E-2	2.9E-3				

* No dermal reference dose available--oral reference dose used.

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 2 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)									
SURFACE SOILS (0 - 1 m):									
VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
	Soil Conc. (mg/kg)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Constituents of Concern									
Antimony	3.1E+1	Error							
Copper	2.9E+3	Error							
Lead (inorganic) *	3.0E+2	Error							
Molybdenum	1.4E+1	Error							
Zinc	4.2E+3	Error							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS									
SURFACE SOILS (0 - 1 m):									
VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)						5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None	
Constituents of Concern									
Antimony	6.8E-1								
Copper	6.8E-1								
Lead (inorganic) *	2.4E-1								
Molybdenum	6.8E-1								
Zinc	6.8E-1								

* = Chemical with user-specified data
 NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Constituents of Concern						
Antimony	3,1E+1	VF samb					
Copper	2,9E+3	VF samb					
Lead (inorganic) *	3,0E+2	VF samb					
Molybdenum	1,4E+1	VF samb					
Zinc	4,2E+3	VF samb					

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Constituents of Concern					
Antimony	6,8E-1					
Copper	6,8E-1					
Lead (inorganic) *	2,4E-1					
Molybdenum	6,8E-1					
Zinc	6,8E-1					

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Antimony							
Copper							
Lead (inorganic) *							
Molybdenum							
Zinc							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern	None	None	None	None	None	None
Antimony						
Copper						
Lead (inorganic) *						
Molybdenum						
Zinc						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS

MAXIMUM PATHWAY EXPOSURE (mg/m³)
Maximum average exposure concentration from soil and groundwater routes.)

Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Antimony				
Copper				
Lead (inorganic) *				
Molybdenum				
Zinc				

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

CARCINOGENIC RISK

Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Antimony	FALSE	-	-	-	-					
Copper	FALSE	-	-	-	-					
Lead (inorganic) *	TRUE	-	-	-	1.2E-5					
Molybdenum	FALSE	-	-	-	-					
Zinc	FALSE	-	-	-	-					

Total Pathway Carcinogenic Risk =

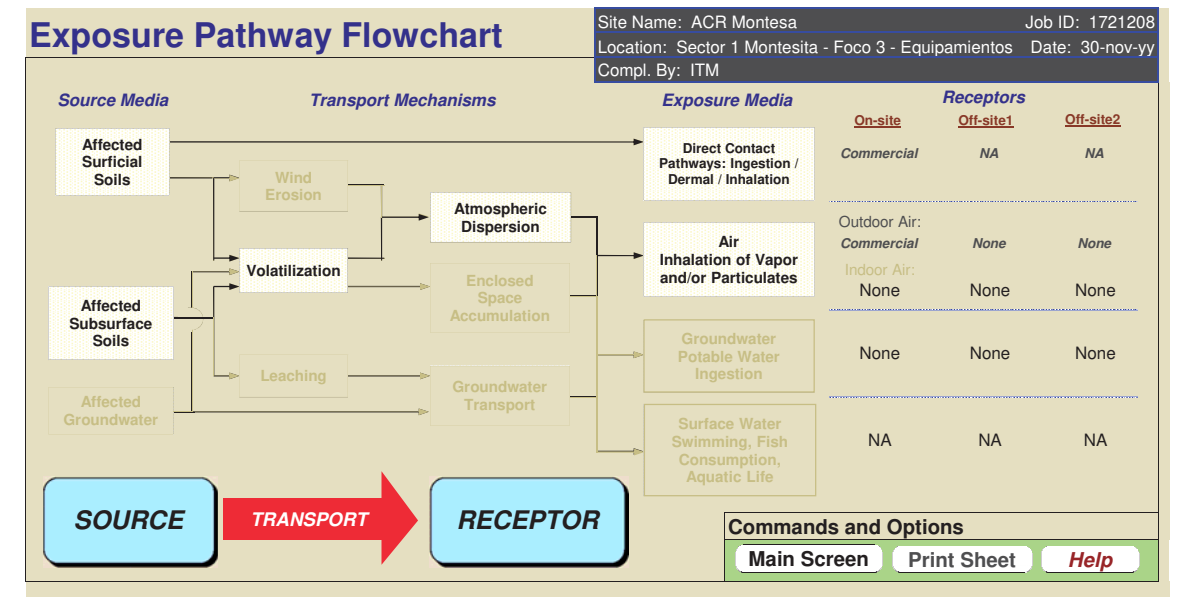
Site Name: ACR Montesa Completed By: ITM Job ID: 1721208
 Site Location: Sector 1 Montesita - Foco 2 - Construcción Date Completed: 30-nov-yy

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Antimony					-				
Copper					-				
Lead (inorganic) *	0.0E+0				-				
Molybdenum					-				
Zinc					-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 1 Montesita - Foco 2 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					
SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)					
Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	2,1E+2	2,9E-8		6,1E-6	-
TPH - Aliph >C16-C21	7,7E+1	8,6E-8		6,6E-6	-
TPH - Aliph >C21-C34	5,5E+2	8,6E-8		4,7E-5	-
TPH - Arom >C16-C21	2,6E+1	6,6E-8		1,7E-6	-
TPH - Arom >C21-C35	1,1E+2	6,6E-8		7,0E-6	-
Phenanthrene	2,2E-1	6,6E-8		1,5E-8	-
Benzo-g,h,i-perylene	3,9E-1	6,6E-8		2,6E-8	-
Bis (2-ethyl-hexyl) phthalate	1,0E+0	7,4E-8		7,4E-8	-
Butyl benzyl phthalate	1,6E-1	2,6E-8		4,1E-9	-
Trimethylbenzene, 1,3,5-	8,3E-2	1,2E-8		9,7E-10	-
Trimethylbenzene, 1,2,4-	2,3E-1	1,2E-8		2,7E-9	-
Trichloroethane, 1,1,1-	2,1E-2	1,2E-8		2,5E-10	-

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
		Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	TRUE	8,8E-7	1,9E-6			8,5E-3	-	2,3E-8	-
TPH - Aliph >C16-C21	FALSE								
TPH - Aliph >C21-C34	FALSE								
TPH - Arom >C16-C21	FALSE								
TPH - Arom >C21-C35	FALSE								
Phenanthrene	FALSE								
Benzo-g,h,i-perylene	FALSE								
Bis (2-ethyl-hexyl) phthalate	TRUE	4,2E-9	7,0E-8			1,4E-2	1,4E-2	1,0E-9	-
Butyl benzyl phthalate	TRUE	6,7E-10	3,5E-9			1,9E-3	1,9E-3	7,9E-12	-
Trimethylbenzene, 1,3,5-	FALSE								
Trimethylbenzene, 1,2,4-	FALSE								
Trichloroethane, 1,1,1-	FALSE								

* No dermal slope factor available—oral slope factor used.

Total Pathway Carcinogenic Risk = 2,4E-8

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION								3 OF 3	
SOIL EXPOSURE PATHWAY								■ (Checked if Pathway is Complete)	
Constituents of Concern	TOXIC EFFECTS				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient		
	(5) Total Toxicant Intake Rate (mg/kg/day)				(a) Oral		(b) Dermal		
	(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b)	(5c)/(6a) + (5d)/(6b)	
Lead (inorganic) *	Tox?	Tox?			-	-			
TPH - Aliph >C16-C21	9.0E-7	5.7E-6			2.0E+0	2.0E+0	3.3E-6		
TPH - Aliph >C21-C34	6.4E-6	4.1E-5			1.6E+0	1.6E+0	2.9E-5		
TPH - Arom >C16-C21	3.1E-7	1.4E-6			3.0E-2	3.0E-2	5.8E-5		
TPH - Arom >C21-C35	1.2E-6	5.8E-6			3.0E-2	3.0E-2	2.3E-4		
Phenanthrene	2.6E-9	1.2E-8			3.0E-2	3.0E-2	4.8E-7		
Benzo-g,h,i-perylene	4.6E-9	2.1E-8			3.0E-2	3.0E-2	8.6E-7		
Bis (2-ethyl-hexyl) phthalate	1.2E-8	2.0E-7			2.0E-2	2.0E-2	1.0E-5		
Butyl benzyl phthalate	1.9E-9	9.7E-9			2.0E-1	2.0E-1	5.8E-8		
Trimethylbenzene, 1,3,5-	9.7E-10	0.0E+0			5.0E-2	5.0E-2	1.9E-8		
Trimethylbenzene, 1,2,4-	2.7E-9	0.0E+0			5.0E-2	5.0E-2	5.4E-8		
Trichloroethane, 1,1,1-	2.5E-10	0.0E+0			2.0E+0	2.0E+0	1.2E-10		
* No dermal reference dose available—oral reference dose used.								Total Pathway Hazard Index = 3.4E-4	

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS							
■ (Checked if Pathway is Complete)							
SURFACE SOILS (0 - 1 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)	
		On-site (0 m) Commercial	On-site (0 m) Construction Worker	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None
Lead (inorganic) *	2.1E+2	Error					
TPH - Aliph >C16-C21	7.7E+1	6.2E+4			1.2E-3		
TPH - Aliph >C21-C34	5.5E+2	5.6E+4			9.8E-3		
TPH - Arom >C16-C21	2.6E+1	1.9E+5			1.4E-4		
TPH - Arom >C21-C35	1.1E+2	2.4E+6			4.5E-5		
Phenanthrene	2.2E-1	4.8E+5			4.6E-7		
Benzo-g,h,i-perylene	3.9E-1	7.7E+7			5.1E-9		
Bis (2-ethyl-hexyl) phthalate	1.0E+0	1.1E+7			8.9E-8		
Butyl benzyl phthalate	1.6E-1	5.3E+6			3.0E-8		
Trimethylbenzene, 1,3,5-	8.3E-2	5.6E+4			1.5E-6		
Trimethylbenzene, 1,2,4-	2.3E-1	5.6E+4			4.1E-6		
Trichloroethane, 1,1,1-	2.1E-2	5.6E+4			3.8E-7		

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
SURFACE SOILS (0 - 1 m):								
VAPOR INHALATION (cont'd)								
Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (d) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Lead (inorganic) *	5,9E-3							
TPH - Aliph >C16-C21	1,6E-2				2,1E-5			
TPH - Aliph >C21-C34	1,6E-2				1,6E-4			
TPH - Arom >C16-C21	1,6E-2				2,3E-6			
TPH - Arom >C21-C35	1,6E-2				7,4E-7			
Phenanthrene	1,6E-2				7,5E-9			
Benzo-g,h,i-perylene	1,6E-2				8,3E-11			
Bis (2-ethyl-hexyl) phthalate	1,6E-2				1,5E-9			
Butyl benzyl phthalate	1,6E-2				4,9E-10			
Trimethylbenzene, 1,3,5-	1,6E-2				2,5E-8			
Trimethylbenzene, 1,2,4-	1,6E-2				6,8E-8			
Trichloroethane, 1,1,1-	1,6E-2				6,2E-9			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Lead (inorganic) *	2,1E+2					
TPH - Aliph >C16-C21	7,7E+1						
TPH - Aliph >C21-C34	5,5E+2						
TPH - Arom >C16-C21	2,6E+1						
TPH - Arom >C21-C35	1,1E+2						
Phenanthrene	2,2E-1						
Benzo-g,h,i-perylene	3,9E-1						
Bis (2-ethyl-hexyl) phthalate	1,0E+0						
Butyl benzyl phthalate	1,6E-1						
Trimethylbenzene, 1,3,5-	8,3E-2						
Trimethylbenzene, 1,2,4-	2,3E-1						
Trichloroethane, 1,1,1-	2,1E-2						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *						
TPH - Aliph >C16-C21						
TPH - Aliph >C21-C34						
TPH - Arom >C16-C21						
TPH - Arom >C21-C35						
Phenanthrene						
Benzo-g,h,i-perylene						
Bis (2-ethyl-hexyl) phthalate						
Butyl benzyl phthalate						
Trimethylbenzene, 1,3,5-						
Trimethylbenzene, 1,2,4-						
Trichloroethane, 1,1,1-						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor		Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		None	None	None	None	None	None
Constituents of Concern							
Lead (inorganic) *							
TPH - Aliph >C16-C21							
TPH - Aliph >C21-C34							
TPH - Arom >C16-C21							
TPH - Arom >C21-C35							
Phenanthrene							
Benzo-g,h,i-perylene							
Bis (2-ethyl-hexyl) phthalate							
Butyl benzyl phthalate							
Trimethylbenzene, 1,3,5-							
Trimethylbenzene, 1,2,4-							
Trichloroethane, 1,1,1-							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
TPH - Aliph >C16-C21						
TPH - Aliph >C21-C34						
TPH - Arom >C16-C21						
TPH - Arom >C21-C35						
Phenanthrene						
Benzo-g,h,i-perylene						
Bis (2-ethyl-hexyl) phthalate						
Butyl benzyl phthalate						
Trimethylbenzene, 1,3,5-						
Trimethylbenzene, 1,2,4-						
Trichloroethane, 1,1,1-						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Constituents of Concern				
Lead (inorganic) *				
TPH - Aliph >C16-C21	2,1E-5			
TPH - Aliph >C21-C34	1,6E-4			
TPH - Arom >C16-C21	2,3E-6			
TPH - Arom >C21-C35	7,4E-7			
Phenanthrene	7,5E-9			
Benzo-g,h,i-perylene	8,3E-11			
Bis (2-ethyl-hexyl) phthalate	1,5E-9			
Butyl benzyl phthalate	4,9E-10			
Trimethylbenzene, 1,3,5-	2,5E-8			
Trimethylbenzene, 1,2,4-	6,8E-8			
Trichloroethane, 1,1,1-	6,2E-9			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE	-	-	-	-	1,2E-5				
TPH - Aliph >C16-C21	FALSE	-	-	-	-	-				
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C16-C21	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Benzo-g,h,i,-perylene	FALSE	-	-	-	-	-				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Butyl benzyl phthalate	FALSE	-	-	-	-	-				
Trimethylbenzene, 1,3,5-	FALSE	-	-	-	-	-				
Trimethylbenzene, 1,2,4-	FALSE	-	-	-	-	-				
Trichloroethane, 1,1,1-	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =										

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 3 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208

RBCA SITE ASSESSMENT

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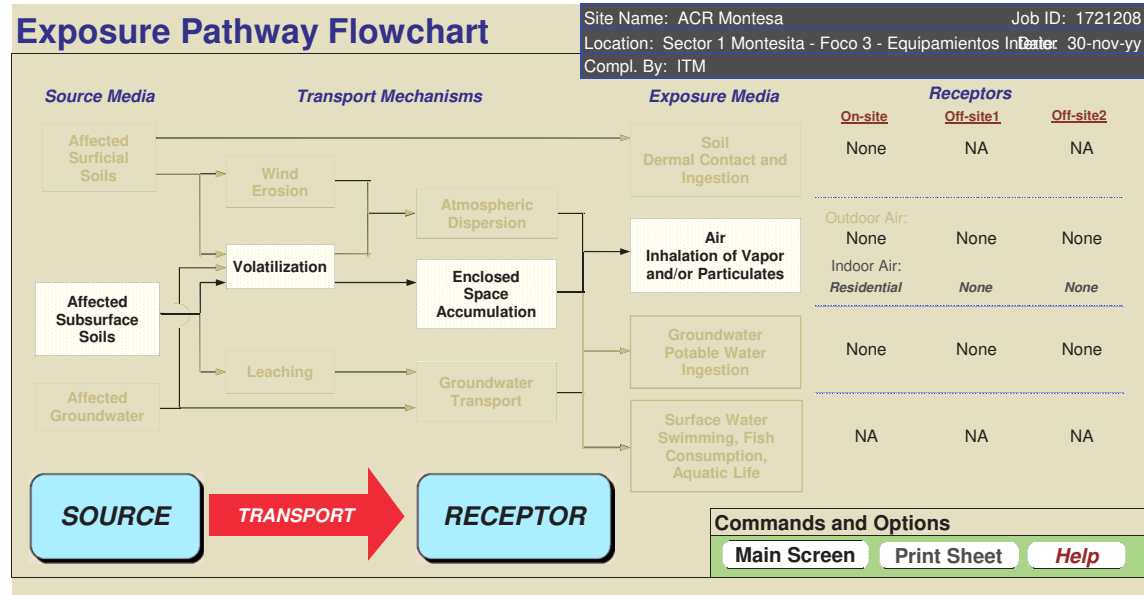
TIER 2 PATHWAY RISK CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
TPH - Aliph >C16-C21	2,1E-5				-				
TPH - Aliph >C21-C34	1,6E-4				-				
TPH - Arom >C16-C21	2,3E-6				-				
TPH - Arom >C21-C35	7,4E-7				-				
Phenanthrene	7,5E-9				-				
Benzo-g,h,i,-perylene	8,3E-11				-				
Bis (2-ethyl-hexyl) phthalate	1,5E-9				-				
Butyl benzyl phthalate	4,9E-10				-				
Trimethylbenzene, 1,3,5-	2,5E-8				6,0E-3	4,1E-6			
Trimethylbenzene, 1,2,4-	6,8E-8				7,0E-3	9,7E-6			
Trichloroethane, 1,1,1-	6,2E-9				5,0E+0	1,2E-9			
Total Pathway Hazard Index =						1,4E-5			

Site Name: ACR Montesa
Site Location: Sector 1 Montesa - Foco 3 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



RBCA SITE ASSESSMENT

1 OF 8

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

Constituents of Concern	1) Source Medium	2) NAF Value (L/kg)	3) Exposure Medium	4) Exposure Multiplier	5) Average Inhalation Exposure
	Soil Conc. (mg/kg)	Receptor	Indoor Air: POE Conc. (mg/m ³) (1) / (2)	(EF×ED)/(AT×365) (unitless)	Concentration (mg/m ³) (3) X (4)
Lead (inorganic) *	2.1E+2	zero VF	On-site (0 m)	On-site (0 m)	1.5E-1
TPH - Aliph >C16-C21	7.7E+1	6.9E+4	Residential	Residential	3.4E-1
TPH - Aliph >C21-C34	5.5E+2	4.7E+4	Residential	Residential	3.4E-1
TPH - Arom >C16-C21	2.6E+1	6.4E+5	Residential	Residential	4.0E-3
TPH - Arom >C21-C35	1.1E+2	1.0E+8	Residential	Residential	1.4E-5
Phenanthrene	2.2E-1	4.2E+6	Residential	Residential	3.6E-7
Benzo-g,h,i-perylene	3.9E-1	1.9E+10	Residential	Residential	1.8E-8
Bis (2-ethyl-hexyl) phthalate	1.0E+0	2.2E+9	Residential	Residential	7.1E-12
Butyl benzyl phthalate	1.6E-1	4.2E+8	Residential	Residential	1.5E-10
Trimethylbenzene, 1,3,5-	8.3E-2	3.3E+3	Residential	Residential	1.3E-10
Trimethylbenzene, 1,2,4-	2.3E-1	4.4E+3	Residential	Residential	8.6E-6
Trichloroethane, 1,1,1-	2.1E-2	1.6E+2	Residential	Residential	1.8E-5
Trichloroethane, 1,1,1-	2.1E-2	1.6E+2	Residential	Residential	4.6E-5

* = Chemical with user-specified data
 NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT							
							2 OF 8
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /3L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern		None	None	None	None	None	None
Lead (inorganic) *							
TPH - Aliph >C16-C21							
TPH - Aliph >C21-C34							
TPH - Arom >C16-C21							
TPH - Arom >C21-C35							
Phenanthrene							
Benzo-g,h,i,-perylene							
Bis (2-ethyl-hexyl) phthalate							
Butyl benzyl phthalate							
Trimethylbenzene, 1,3,5-							
Trimethylbenzene, 1,2,4-							
Trichloroethane, 1,1,1-							

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT						
						3 OF 8
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS	Exposure Concentration					
	4) Exposure Multiplier (EF*ED)/(AT*365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None
Lead (inorganic) *						
TPH - Aliph >C16-C21						
TPH - Aliph >C21-C34						
TPH - Arom >C16-C21						
TPH - Arom >C21-C35						
Phenanthrene						
Benzo-g,h,i,-perylene						
Bis (2-ethyl-hexyl) phthalate						
Butyl benzyl phthalate						
Trimethylbenzene, 1,3,5-						
Trimethylbenzene, 1,2,4-						
Trichloroethane, 1,1,1-						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure
 * = Chemical with user-specified data

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT							
4 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /L)			3) Exposure Medium		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	Soil Conc. (mg/kg)	None	None	None	Indoor Air: POE Conc. (mg/m ³) (1) / (2)	None	None
Lead (inorganic) *	2.1E+2						
TPH - Aliph >C16-C21	7.7E+1						
TPH - Aliph >C21-C34	5.5E+2						
TPH - Arom >C16-C21	2.6E+1						
TPH - Arom >C21-C35	1.1E+2						
Phenanthrene	2.2E-1						
Benzo-g,h,i,-perylene	3.9E-1						
Bis (2-ethyl-hexyl) phthalate	1.0E+0						
Butyl benzyl phthalate	1.6E-1						
Trimethylbenzene, 1,3,5-	8.3E-2						
Trimethylbenzene, 1,2,4-	2.3E-1						
Trichloroethane, 1,1,1-	2.1E-2						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT								
5 OF 8								
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)								
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS	Exposure Concentration							
	1) Source Medium	2) NAF Value (m ³ /L)			4) Exposure Multiplier		5) Average Inhalation Exposure	
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	(EF*ED)/(AT*365) (unitless)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	Soil Conc. (mg/kg)	None	None	None	Concentration (mg/m ³) (3) X (4)	None	None	
Lead (inorganic) *	2.1E+2							
TPH - Aliph >C16-C21	7.7E+1							
TPH - Aliph >C21-C34	5.5E+2							
TPH - Arom >C16-C21	2.6E+1							
TPH - Arom >C21-C35	1.1E+2							
Phenanthrene	2.2E-1							
Benzo-g,h,i,-perylene	3.9E-1							
Bis (2-ethyl-hexyl) phthalate	1.0E+0							
Butyl benzyl phthalate	1.6E-1							
Trimethylbenzene, 1,3,5-	8.3E-2							
Trimethylbenzene, 1,2,4-	2.3E-1							
Trichloroethane, 1,1,1-	2.1E-2							

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT			
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION			
INDOOR AIR EXPOSURE PATHWAYS			
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) (Maximum average exposure concentration from soil and groundwater routes.)		
	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Lead (inorganic) *			
TPH - Aliph >C16-C21	3,8E-4		
TPH - Aliph >C21-C34	4,0E-3		
TPH - Arom >C16-C21	1,4E-5		
TPH - Arom >C21-C35	3,6E-7		
Phenanthrene	1,8E-8		
Benzo-g,h,i-perylene	7,1E-12		
Bis (2-ethyl-hexyl) phthalate	1,5E-10		
Butyl benzyl phthalate	1,3E-10		
Trimethylbenzene, 1,3,5-	8,6E-6		
Trimethylbenzene, 1,2,4-	1,8E-5		
Trichloroethane, 1,1,1-	4,6E-5		

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT								
TIER 2 PATHWAY RISK CALCULATION								
INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)								
Constituents of Concern	(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m ³)			(3) Inhalation Unit Risk Factor (µg/m ⁻³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None		On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Lead (inorganic) *	TRUE				1,2E-5			
TPH - Aliph >C16-C21	FALSE	-	-	-	-			
TPH - Aliph >C21-C34	FALSE	-	-	-	-			
TPH - Arom >C16-C21	FALSE	-	-	-	-			
TPH - Arom >C21-C35	FALSE	-	-	-	-			
Phenanthrene	FALSE	-	-	-	-			
Benzo-g,h,i-perylene	FALSE	-	-	-	-			
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-			
Butyl benzyl phthalate	FALSE	-	-	-	-			
Trimethylbenzene, 1,3,5-	FALSE	-	-	-	-			
Trimethylbenzene, 1,2,4-	FALSE	-	-	-	-			
Trichloroethane, 1,1,1-	FALSE	-	-	-	-			

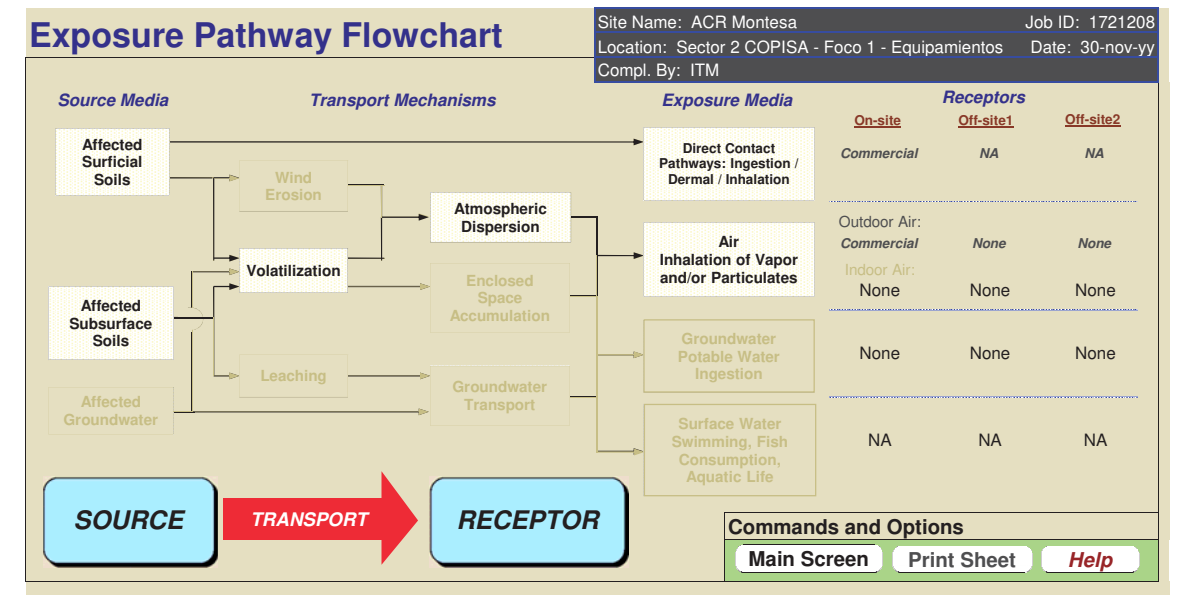
Total Pathway Carcinogenic Risk =

Site Name: ACR Montesa
 Site Location: Sector 1 Montesita - Foco 3 - Equipamientos Interior
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)									
Constituents of Concern	TOXIC EFFECTS			(6) Inhalation Reference Concentration (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				
	(5) Maximum Toxicant Exposure (mg/m ³)				On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None		
	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None						
Lead (inorganic) *	0.0E+0	NC	NC	-					
TPH - Aliph >C16-C21	3.8E-4	NC	NC	-					
TPH - Aliph >C21-C34	4.0E-3	NC	NC	-					
TPH - Arom >C16-C21	1.4E-5	NC	NC	-					
TPH - Arom >C21-C35	3.6E-7	NC	NC	-					
Phenanthrene	1.8E-8	NC	NC	-					
Benzo-g,h,i-perylene	7.1E-12	NC	NC	-					
Bis (2-ethyl-hexyl) phthalate	1.5E-10	NC	NC	-					
Butyl benzyl phthalate	1.3E-10	NC	NC	-					
Trimethylbenzene, 1,3,5-	8.6E-6	NC	NC	6.0E-3	1.4E-3				
Trimethylbenzene, 1,2,4-	1.8E-5	NC	NC	7.0E-3	2.5E-3				
Trichloroethane, 1,1,1-	4.6E-5	NC	NC	5.0E+0	9.2E-6				
Total Pathway Hazard Index =					4.0E-3				

Site Name: ACR Montesa
 Site Location: Sector 1 Montesa - Foco 3 - Equipamientos Interior
 Completed By: ITM
 Date Completed: 30-nov-yy
 Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)					
Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	8,3E+1	2,9E-8		2,4E-6	-
Benzo-a-pyrene	1,4E+0	2,4E-8		3,3E-8	-
Benzo-g,h,i-perylene	1,4E-1	6,6E-8		9,2E-9	-
Phenanthrene	2,4E+0	6,6E-8		1,6E-7	-
Antimony	7,8E+0	3,6E-8		2,8E-7	-
Bis (2-ethyl-hexyl) phthalate	1,6E-1	7,4E-8		1,2E-8	-
Carbazole	3,3E-1	2,3E-8		7,6E-9	-
Dibenzofuran	1,4E-1	8,6E-8		1,2E-8	-

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Job ID: 1721208
Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
		Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	TRUE	3,5E-7	7,3E-7			8,5E-3	-	9,2E-9	-
Benzo-a-pyrene	TRUE	5,9E-9	2,7E-8			7,3E+0	7,3E+0	2,4E-7	-
Benzo-g,h,i-perylene	FALSE					-	-	-	-
Phenanthrene	FALSE					-	-	-	-
Antimony	FALSE					-	-	-	-
Bis (2-ethyl-hexyl) phthalate	TRUE	6,7E-10	1,1E-8			1,4E-2	1,4E-2	1,7E-10	-
Carbazole	TRUE	1,4E-9	6,2E-9			2,0E-2	2,0E-2	1,5E-10	-
Dibenzofuran	FALSE					-	-	-	-
* No dermal slope factor available—oral slope factor used.								Total Pathway Carcinogenic Risk =	
								2,5E-7	

Site Name: ACR Montesa
Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
Completed By: ITM

Date Completed: 30-nov-yy
Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION								3 OF 3
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)								
Constituents of Concern	TOXIC EFFECTS				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient	
	(5) Total Toxicant Intake Rate (mg/kg/day)				(a) Oral		(b) Dermal	
	(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b)	(5c)/(6a) + (5d)/(6b)
Lead (inorganic) *	Tox?	Tox?			-	-		
Benzo-a-pyrene	Tox?	Tox?			-	-		
Benzo-g,h,i-perylene	1.6E-9	7.6E-9			3.0E-2	3.0E-2	3.1E-7	
Phenanthrene	2.8E-8	1.3E-7			3.0E-2	3.0E-2	5.3E-6	
Antimony	9.2E-8	1.9E-7			4.0E-4	4.0E-4	7.1E-4	
Bis (2-ethyl-hexyl) phthalate	1.9E-9	3.1E-8			2.0E-2	2.0E-2	1.7E-6	
Carbazole	Tox?	Tox?			-	-		
Dibenzofuran	1.6E-9	1.0E-8			4.0E-3	4.0E-3	3.0E-6	
* No dermal reference dose available--oral reference dose used.								
Total Pathway Hazard Index =								7.2E-4

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
Constituents of Concern	1) Source Medium		2) NAF Value (m ³ /kg)		3) Exposure Medium		
	Soil Conc. (mg/kg)	Receptor		Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Lead (inorganic) *	8.3E+1	Error					
Benzo-a-pyrene	1.4E+0	3.7E+7			3.8E-8		
Benzo-g,h,i-perylene	1.4E-1	7.7E+7			1.8E-9		
Phenanthrene	2.4E+0	4.8E+5			5.0E-6		
Antimony	7.8E+0	Error					
Bis (2-ethyl-hexyl) phthalate	1.6E-1	1.1E+7			1.4E-8		
Carbazole	3.3E-1	2.3E+5			1.4E-6		
Dibenzofuran	1.4E-1	2.9E+5			4.8E-7		

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
SURFACE SOILS (0 - 1 m):								
VAPOR INHALATION (cont'd)								
Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Lead (inorganic) *	5,9E-3							
Benzo-a-pyrene	5,9E-3				2,2E-10			
Benzo-g,h,i-perylene	1,6E-2				3,0E-11			
Phenanthrene	1,6E-2				8,2E-8			
Antimony	1,6E-2							
Bis (2-ethyl-hexyl) phthalate	1,6E-2				2,4E-10			
Carbazole	1,6E-2				2,3E-8			
Dibenzofuran	1,6E-2				7,8E-9			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Lead (inorganic) *	8,3E+1					
Benzo-a-pyrene	1,4E+0						
Benzo-g,h,i-perylene	1,4E-1						
Phenanthrene	2,4E+0						
Antimony	7,8E+0						
Bis (2-ethyl-hexyl) phthalate	1,6E-1						
Carbazole	3,3E-1						
Dibenzofuran	1,4E-1						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Antimony						
Bis (2-ethyl-hexyl) phthalate						
Carbazole						
Dibenzofuran						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern							
Lead (inorganic) *							
Benzo-a-pyrene							
Benzo-g,h,i-perylene							
Phenanthrene							
Antimony							
Bis (2-ethyl-hexyl) phthalate							
Carbazole							
Dibenzofuran							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Antimony						
Bis (2-ethyl-hexyl) phthalate						
Carbazole						
Dibenzofuran						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Constituents of Concern				
Lead (inorganic) *				
Benzo-a-pyrene	2,2E-10			
Benzo-g,h,i-perylene	3,0E-11			
Phenanthrene	8,2E-8			
Antimony				
Bis (2-ethyl-hexyl) phthalate	2,4E-10			
Carbazole	2,3E-8			
Dibenzofuran	7,8E-9			

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1,2E-5				
Benzo-a-pyrene	TRUE	2,2E-10		-	-	8,8E-4	2,0E-10			
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Antimony	FALSE	-	-	-	-	-				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Carbazole	FALSE	-	-	-	-	-				
Dibenzofuran	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =							2,0E-10			

Site Name: ACR Montesa
Site Location: Sector 2 COPISA - Foco 1 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208

RBCA SITE ASSESSMENT

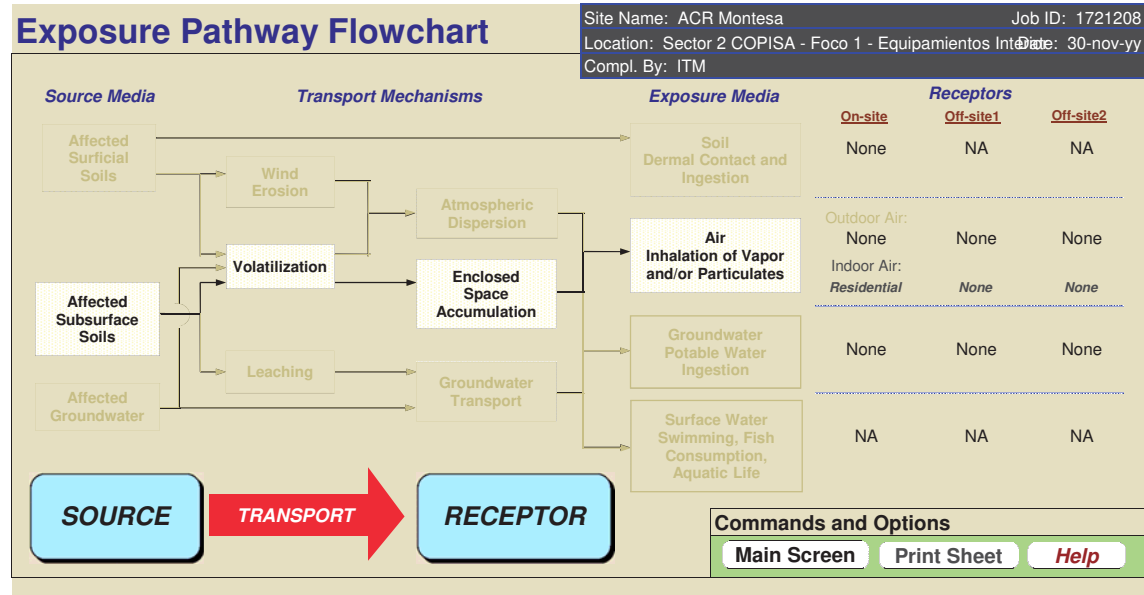
9 OF 9

TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None	
Lead (inorganic) *	0,0E+0				-					
Benzo-a-pyrene	6,3E-10				-					
Benzo-g,h,i-perylene	3,0E-11				-					
Phenanthrene	8,2E-8				-					
Antimony					-					
Bis (2-ethyl-hexyl) phthalate	2,4E-10				-					
Carbazole	2,3E-8				-					
Dibenzofuran	7,8E-9				-					
Total Pathway Hazard Index =										

Site Name: ACR Montesa
Site Location: Sector 2 COPISA - Foco 1 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



RBCA SITE ASSESSMENT

1 OF 8

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

SOILS (0 - 1 m): VAPOR

INTRUSION INTO BUILDINGS	1) Source Medium	2) NAF Value (L/kg) Receptor	3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)	5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)
	Soil Conc. (mg/kg)	On-site (0 m) Residential	On-site (0 m) Residential	On-site (0 m) Residential	On-site (0 m) Residential
Constituents of Concern					
Lead (inorganic) *	8.3E+1	zero VF	7.4E-11	1.5E-1	1.1E-11
Benzo-a-pyrene	1.4E+0	1.9E+10	1.9E-10	1.5E-1	2.7E-12
Benzo-g,h,i-perylene	1.5E-1	1.9E+10	8.0E-12	3.4E-1	1.9E-7
Phenanthrene	2.4E+0	4.2E+6	5.7E-7	3.4E-1	1.9E-7
Antimony	7.8E+0	zero VF		3.4E-1	
Bis (2-ethyl-hexyl) phthalate	1.0E-1	2.2E+9	4.4E-11	3.4E-1	1.5E-11
Carbazole	3.3E-1	1.0E+6	3.3E-7	3.4E-1	1.1E-7
Dibenzofuran	1.4E-1	1.6E+6	8.9E-8	3.4E-1	3.1E-8

* = Chemical with user-specified data
 NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT							
2 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /3L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Lead (inorganic) *							
Benzo-a-pyrene							
Benzo-g,h,i-perylene							
Phenanthrene							
Antimony							
Bis (2-ethyl-hexyl) phthalate							
Carbazole							
Dibenzofuran							
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT						
3 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS	Exposure Concentration					
	4) Exposure Multiplier (EF*ED)/(AT*365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Antimony						
Bis (2-ethyl-hexyl) phthalate						
Carbazole						
Dibenzofuran						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208		

RBCA SITE ASSESSMENT							
4 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS							
	Exposure Concentration		2) NAF Value (m ³ /3L)			3) Exposure Medium	
	1) Source Medium	Receptor			Indoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	Soil Conc. (mg/kg)	None	None	None	None	None	None
Lead (inorganic) *	8,3E+1						
Benzo-a-pyrene	1,4E+0						
Benzo-g,h,i-perylene	1,5E-1						
Phenanthrene	2,4E+0						
Antimony	7,8E+0						
Bis (2-ethyl-hexyl) phthalate	1,0E-1						
Carbazole	3,3E-1						
Dibenzofuran	1,4E-1						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT						
5 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS						
	4) Exposure Multiplier (EF*ED)/(AT*365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Antimony						
Bis (2-ethyl-hexyl) phthalate						
Carbazole						
Dibenzofuran						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208		

RBCA SITE ASSESSMENT			
6 OF 8			
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION			
INDOOR AIR EXPOSURE PATHWAYS			
MAXIMUM PATHWAY EXPOSURE (mg/m ³) (Maximum average exposure concentration from soil and groundwater routes.)			
Constituents of Concern	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	None	None
Lead (inorganic) *			
Benzo-a-pyrene	1,1E-11		
Benzo-g,h,i-perylene	2,7E-12		
Phenanthrene	1,9E-7		
Antimony			
Bis (2-ethyl-hexyl) phthalate	1,5E-11		
Carbazole	1,1E-7		
Dibenzofuran	3,1E-8		

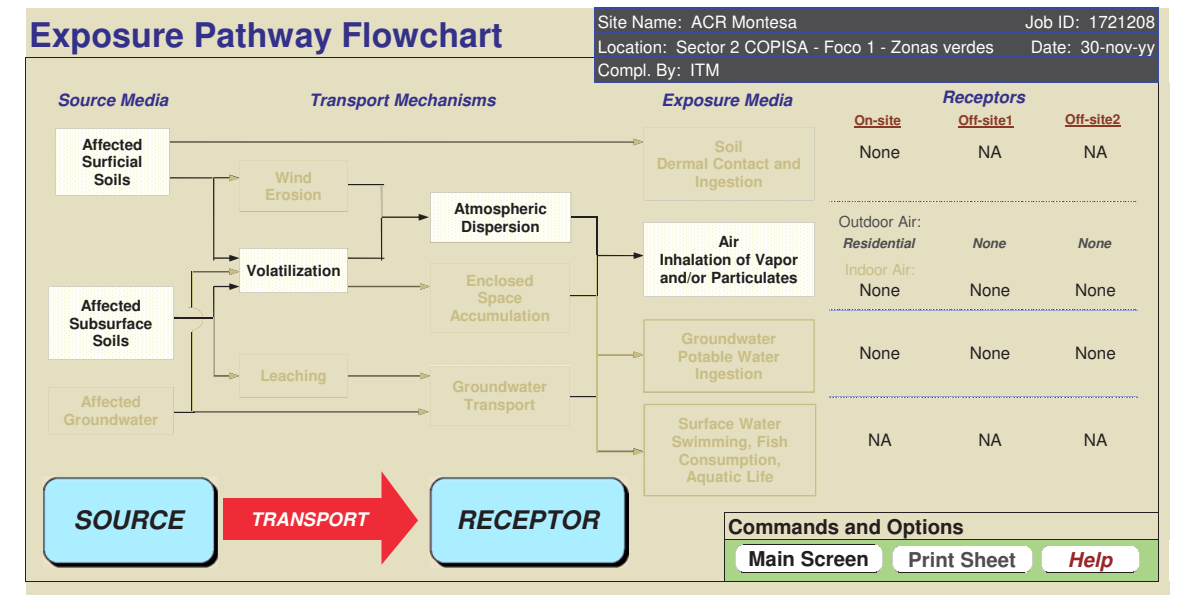
Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT								
7 OF 8								
TIER 2 PATHWAY RISK CALCULATION								
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)								
Constituents of Concern	(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m ³)			(3) Inhalation Unit Risk Factor (µg/m ⁻³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	None	None		Residential	None	None
Lead (inorganic) *	TRUE		-	-	1,2E-5			
Benzo-a-pyrene	TRUE	1,1E-11	-	-	8,8E-4	9,5E-12		
Benzo-g,h,i-perylene	FALSE	-	-	-	-			
Phenanthrene	FALSE	-	-	-	-			
Antimony	FALSE	-	-	-	-			
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-			
Carbazole	FALSE	-	-	-	-			
Dibenzofuran	FALSE	-	-	-	-			
Total Pathway Carcinogenic Risk =						9,5E-12		

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)									
Constituents of Concern	TOXIC EFFECTS (5) Maximum Toxicant Exposure (mg/m ³)			(6) Inhalation Reference Concentration (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		
	Residential	None	None		Residential	None	None		
Lead (inorganic) *	0.0E+0	NC	NC	-					
Benzo-a-pyrene	2.5E-11	NC	NC	-					
Benzo-g,h,i-perylene	2.7E-12	NC	NC	-					
Phenanthrene	1.9E-7	NC	NC	-					
Antimony		NC	NC	-					
Bis (2-ethyl-hexyl) phthalate	1.5E-11	NC	NC	-					
Carbazole	1.1E-7	NC	NC	-					
Dibenzofuran	3.1E-8	NC	NC	-					
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM



RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
SURFACE SOILS (0.3 - 1 m): VAPOR INHALATION	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
Constituents of Concern									
Lead (inorganic) *	8,3E+1	Error							
Benzo-a-pyrene	1,4E+0	3,7E+7			3,8E-8				
Benzo-g,h,i-perylene	1,4E-1	7,7E+7			1,8E-9				
Phenanthrene	2,4E+0	4,8E+5			5,0E-6				
Antimony	7,8E+0	Error							
Bis (2-ethyl-hexyl) phthalate	1,0E-1	1,1E+7			8,9E-9				
Carbazole	3,3E-1	2,3E+5			1,4E-6				
Dibenzofuran	1,4E-1	2,9E+5			4,8E-7				

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS																	
SURFACE SOILS (0.3 - 1 m): VAPOR INHALATION (cont'd)	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)				4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None	Residential	Construction Worker	None	None	Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
Constituents of Concern																	
Lead (inorganic) *	8,3E+1	Error															
Benzo-a-pyrene	1,4E+0	3,7E+7			3,8E-8				3,5E-2					1,3E-9			
Benzo-g,h,i-perylene	1,4E-1	7,7E+7			1,8E-9				3,5E-2					1,5E-10			
Phenanthrene	2,4E+0	4,8E+5			5,0E-6				8,2E-2					4,1E-7			
Antimony	7,8E+0	Error							8,2E-2								
Bis (2-ethyl-hexyl) phthalate	1,0E-1	1,1E+7			8,9E-9				8,2E-2					7,4E-10			
Carbazole	3,3E-1	2,3E+5			1,4E-6				8,2E-2					1,2E-7			
Dibenzofuran	1,4E-1	2,9E+5			4,8E-7				8,2E-2					3,9E-8			

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg)			3) Exposure Medium		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
		Residential	None	None	Residential	None	Off-site 2 (0 m)
Lead (inorganic) *	8,3E+1	VFsamb					
Benzo-a-pyrene	1,4E+0	3,1E+10			4,6E-11		
Benzo-g,h,i-perylene	1,4E-1	1,4E+11			1,0E-12		
Phenanthrene	2,4E+0	5,3E+6			4,5E-7		
Antimony	7,8E+0	VFsamb					
Bis (2-ethyl-hexyl) phthalate	1,0E-1	2,9E+9			3,5E-11		
Carbazole	3,3E-1	1,3E+6			2,6E-7		
Dibenzofuran	1,4E-1	2,0E+6			7,1E-8		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m):						
VAPOR INHALATION (cont'd)						
Constituents of Concern	4) Exposure Multiplier			5) Average Inhalation Exposure		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	Concentration (mg/m ³) (3) X (4)		
	Residential	None	None	Residential	None	Off-site 2 (0 m)
Lead (inorganic) *	3,5E-2					
Benzo-a-pyrene	3,5E-2			1,6E-12		
Benzo-g,h,i-perylene	8,2E-2			8,5E-14		
Phenanthrene	8,2E-2			3,7E-8		
Antimony	8,2E-2					
Bis (2-ethyl-hexyl) phthalate	8,2E-2			2,9E-12		
Carbazole	8,2E-2			2,2E-8		
Dibenzofuran	8,2E-2			5,8E-9		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Lead (inorganic) *							
Benzo-a-pyrene							
Benzo-g,h,i-perylene							
Phenanthrene							
Antimony							
Bis (2-ethyl-hexyl) phthalate							
Carbazole							
Dibenzofuran							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern	None	None	None	None	None	None
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Antimony						
Bis (2-ethyl-hexyl) phthalate						
Carbazole						
Dibenzofuran						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None
Lead (inorganic) *				
Benzo-a-pyrene	1,3E-9			
Benzo-g,h,i-perylene	1,5E-10			
Phenanthrene	4,1E-7			
Antimony				
Bis (2-ethyl-hexyl) phthalate	7,4E-10			
Carbazole	1,2E-7			
Dibenzofuran	3,9E-8			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None		Residential	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1,2E-5				
Benzo-a-pyrene	TRUE	1,3E-9		-	-	8,8E-4	1,2E-9			
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Antimony	FALSE	-	-	-	-	-				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Carbazole	FALSE	-	-	-	-	-				
Dibenzofuran	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =							1,2E-9			

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes

Completed By: ITM
 Date Completed: 30-nov-yy

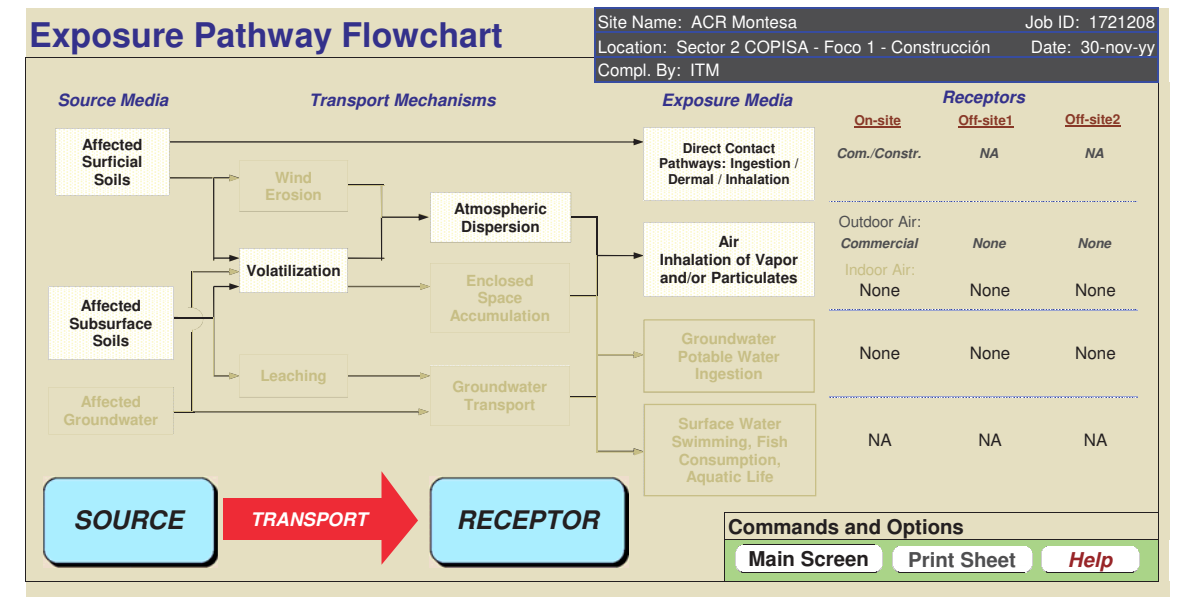
Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None		Residential	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
Benzo-a-pyrene	3,1E-9				-				
Benzo-g,h,i-perylene	1,5E-10				-				
Phenanthrene	4,1E-7				-				
Antimony					-				
Bis (2-ethyl-hexyl) phthalate	7,4E-10				-				
Carbazole	1,2E-7				-				
Dibenzofuran	3,9E-8				-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 2 COPISA - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)					
Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	8,3E+1	1,2E-6	1,3E-7	1,0E-4	1,0E-5
Benzo-a-pyrene	1,4E+0	9,8E-7	5,5E-9	1,4E-6	7,8E-9
Benzo-g,h,i-perylene	1,4E-1	2,7E-6	3,9E-7	3,8E-7	5,4E-8
Phenanthrene	2,4E+0	2,7E-6	3,9E-7	6,6E-6	9,3E-7
Antimony	7,8E+0	1,5E-6	2,4E-7	1,2E-5	1,9E-6
Bis (2-ethyl-hexyl) phthalate	1,0E-1	3,1E-6	1,6E-8	3,1E-7	1,6E-9
Carbazole	3,3E-1	9,6E-7	5,5E-9	3,2E-7	1,8E-9
Dibenzofuran	1,4E-1	3,6E-6	4,9E-7	5,0E-7	6,8E-8

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
		Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	TRUE	1,5E-5	3,1E-5	1,4E-7	1,5E-7	8,5E-3	-	3,8E-7	2,4E-9
Benzo-a-pyrene	TRUE	2,4E-7	1,1E-6	2,3E-9	5,4E-9	7,3E+0	7,3E+0	1,0E-5	5,7E-8
Benzo-g,h,i-perylene	FALSE			Missing Sfo	Tox?	-	-		-
Phenanthrene	FALSE			Missing Sfo	Tox?	-	-		-
Antimony	FALSE			Missing Sfo	Tox?	-	-		-
Bis (2-ethyl-hexyl) phthalate	TRUE	1,7E-8	2,9E-7	1,7E-10	1,4E-9	1,4E-2	1,4E-2	4,3E-9	2,2E-11
Carbazole	TRUE	5,8E-8	2,6E-7	5,5E-10	1,2E-9	2,0E-2	2,0E-2	6,4E-9	3,6E-11
Dibenzofuran	FALSE			Missing Sfo	Tox?	-	-		-

* No dermal slope factor available—oral slope factor used.

Total Pathway Carcinogenic Risk = 1,0E-5 5,9E-8

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION 3 OF 3									
SOIL EXPOSURE PATHWAY ■ (Checked if Pathway is Complete)									
Constituents of Concern	TOXIC EFFECTS				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient		
	(5) Total Toxicant Intake Rate (mg/kg/day)				(a) Oral		(b) Dermal		
	(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b)	(5c)/(6a) + (5d)/(6b)	
Lead (inorganic) *	Tox?	Tox?	Missing Rfdo	Missing RfDd	-	-			
Benzo-a-pyrene	Tox?	Tox?	Missing Rfdo	Missing RfDd	-	-			
Benzo-g,h,i-perylene	6.8E-8	3.2E-7	1.6E-8	3.8E-8	3.0E-2	3.0E-2	1.3E-5	1.8E-6	
Phenanthrene	1.2E-6	5.4E-6	2.8E-7	6.5E-7	3.0E-2	3.0E-2	2.2E-4	3.1E-5	
Antimony	3.8E-6	8.0E-6	9.2E-7	9.6E-7	4.0E-4	4.0E-4	3.0E-2	4.7E-3	
Bis (2-ethyl-hexyl) phthalate	4.9E-8	8.1E-7	1.2E-8	9.8E-8	2.0E-2	2.0E-2	4.3E-5	5.5E-6	
Carbazole	Tox?	Tox?	Missing Rfdo	Missing RfDd	-	-			
Dibenzofuran	6.8E-8	4.3E-7	1.6E-8	5.2E-8	4.0E-3	4.0E-3	1.3E-4	1.7E-5	
* No dermal reference dose available--oral reference dose used.									
Total Pathway Hazard Index =							3.0E-2	4.8E-3	

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT 1 OF 9								
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)								
SURFACE SOILS (0 - 1 m):								
VAPOR INHALATION								
Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None
Lead (inorganic) *	8.3E+1	Error						
Benzo-a-pyrene	1.4E+0	3.7E+7				3.8E-8		
Benzo-g,h,i-perylene	1.4E-1	7.7E+7				1.8E-9		
Phenanthrene	2.4E+0	4.8E+5				5.0E-6		
Antimony	7.8E+0	Error						
Bis (2-ethyl-hexyl) phthalate	1.0E-1	1.1E+7				8.9E-9		
Carbazole	3.3E-1	2.3E+5				1.4E-6		
Dibenzofuran	1.4E-1	2.9E+5				4.8E-7		

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa
 Site Location: Sector 2 COPISA - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
SURFACE SOILS (0 - 1 m):								
VAPOR INHALATION (cont'd)								
Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Lead (inorganic) *	2,4E-1							
Benzo-a-pyrene	2,4E-1				9,4E-9			
Benzo-g,h,i-perylene	6,8E-1				1,2E-9			
Phenanthrene	6,8E-1				3,4E-6			
Antimony	6,8E-1							
Bis (2-ethyl-hexyl) phthalate	6,8E-1				6,1E-9			
Carbazole	6,8E-1				9,6E-7			
Dibenzofuran	6,8E-1				3,3E-7			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1,3 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg)			3) Exposure Medium		
	Soil Conc. (mg/kg)	Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Commercial	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Lead (inorganic) *	8,3E+1	VFsamb					
Benzo-a-pyrene	1,4E+0	3,1E+10			4,6E-11		
Benzo-g,h,i-perylene	1,4E-1	1,4E+11			1,0E-12		
Phenanthrene	2,4E+0	5,3E+6			4,5E-7		
Antimony	7,8E+0	VFsamb					
Bis (2-ethyl-hexyl) phthalate	1,0E-1	2,9E+9			3,5E-11		
Carbazole	3,3E-1	1,3E+6			2,6E-7		
Dibenzofuran	1,4E-1	2,0E+6			7,1E-8		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED) _i (AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *	2,4E-1					
Benzo-a-pyrene	2,4E-1			1,1E-11		
Benzo-g,h,i-perylene	6,8E-1			7,1E-13		
Phenanthrene	6,8E-1			3,1E-7		
Antimony	6,8E-1					
Bis (2-ethyl-hexyl) phthalate	6,8E-1			2,4E-11		
Carbazole	6,8E-1			1,8E-7		
Dibenzofuran	6,8E-1			4,9E-8		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern							
Lead (inorganic) *							
Benzo-a-pyrene							
Benzo-g,h,i-perylene							
Phenanthrene							
Antimony							
Bis (2-ethyl-hexyl) phthalate							
Carbazole							
Dibenzofuran							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
Benzo-a-pyrene						
Benzo-g,h,i-perylene						
Phenanthrene						
Antimony						
Bis (2-ethyl-hexyl) phthalate						
Carbazole						
Dibenzofuran						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Constituents of Concern				
Lead (inorganic) *				
Benzo-a-pyrene	9,4E-9			
Benzo-g,h,i-perylene	1,2E-9			
Phenanthrene	3,4E-6			
Antimony				
Bis (2-ethyl-hexyl) phthalate	6,1E-9			
Carbazole	9,6E-7			
Dibenzofuran	3,3E-7			

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 COPISA - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

8 OF 9

TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1,2E-5				
Benzo-a-pyrene	TRUE	9,4E-9		-	-	8,8E-4	8,2E-9			
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Antimony	FALSE	-	-	-	-	-				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Carbazole	FALSE	-	-	-	-	-				
Dibenzofuran	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =							8,2E-9			

Site Name: ACR Montesa
Site Location: Sector 2 COPISA - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208

RBCA SITE ASSESSMENT

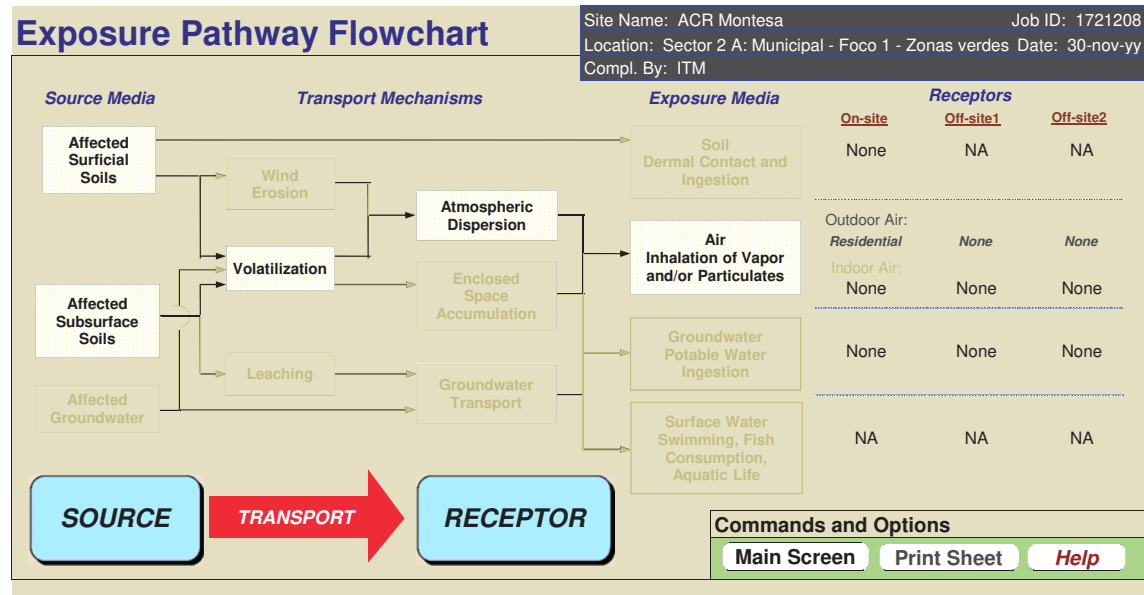
9 OF 9

TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None	
Lead (inorganic) *	0,0E+0				-					
Benzo-a-pyrene	2,6E-8				-					
Benzo-g,h,i-perylene	1,2E-9				-					
Phenanthrene	3,4E-6				-					
Antimony					-					
Bis (2-ethyl-hexyl) phthalate	6,1E-9				-					
Carbazole	9,6E-7				-					
Dibenzofuran	3,3E-7				-					
Total Pathway Hazard Index =										

Site Name: ACR Montesa
Site Location: Sector 2 COPISA - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

SURFACE SOILS (0.3 - 1 m):

VAPOR INHALATION

Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg)				3) Exposure Medium			
	Soil Conc. (mg/kg)	Receptor				Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	None	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	None
Lead (inorganic) *	8,3E+1	Error							
Benzo-a-pyrene	9,9E-1	3,7E+7			2,7E-8				
Dibenz-a,h-anthracene	3,2E-1	3,2E+8			1,0E-9				
TPH - Aliph >C21-C34	7,4E+1	5,6E+4			1,3E-3				
TPH - Arom >C21-C35	1,7E+2	2,4E+6			7,3E-5				
Phenanthrene	4,6E-1	4,8E+5			9,6E-7				
Benzo-g,h,i-perylene	8,2E-1	7,7E+7			1,1E-8				
Bis (2-ethyl-hexyl) phthalate	1,0E-1	1,1E+7			8,9E-9				

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
SURFACE SOILS (0.3 - 1 m):								
VAPOR INHALATION (cont'd)								
Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (d) X (e)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
Lead (inorganic) *	3,5E-2				9,5E-10			
Benzo-a-pyrene	3,5E-2				3,5E-11			
Dibenz-a,h-anthracene	3,5E-2				1,1E-4			
TPH - Aliph >C21-C34	8,2E-2				6,0E-6			
TPH - Arom >C21-C35	8,2E-2				7,9E-8			
Phenanthrene	8,2E-2				8,8E-10			
Benzo-g,h,i-perylene	8,2E-2				7,4E-10			
Bis (2-ethyl-hexyl) phthalate	8,2E-2							

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Lead (inorganic) *	8,3E+1	VFsamb				
Benzo-a-pyrene	9,9E-1	3,1E+10			3,2E-11		
Dibenz-a,h-anthracene	3,2E-1	2,3E+12			1,4E-13		
TPH - Aliph >C21-C34	7,4E+1	5,9E+4			1,3E-3		
TPH - Arom >C21-C35	1,7E+2	1,3E+8			1,4E-6		
Phenanthrene	4,6E-1	5,3E+6			8,7E-8		
Benzo-g,h,i-perylene	8,2E-1	1,4E+11			6,1E-12		
Bis (2-ethyl-hexyl) phthalate	1,0E-1	2,9E+9			3,5E-11		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED) _i (AT×365) _i (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	None	None	Residential	None	None
Constituents of Concern						
Lead (inorganic) *	3,5E-2					
Benzo-a-pyrene	3,5E-2			1,1E-12		
Dibenz-a,h-anthracene	3,5E-2			4,9E-15		
TPH - Aliph >C21-C34	8,2E-2			1,0E-4		
TPH - Arom >C21-C35	8,2E-2			1,1E-7		
Phenanthrene	8,2E-2			7,1E-9		
Benzo-g,h,i-perylene	8,2E-2			5,0E-13		
Bis (2-ethyl-hexyl) phthalate	8,2E-2			2,9E-12		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern							
Lead (inorganic) *							
Benzo-a-pyrene							
Dibenz-a,h-anthracene							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Phenanthrene							
Benzo-g,h,i-perylene							
Bis (2-ethyl-hexyl) phthalate							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None
Lead (inorganic) *						
Benzo-a-pyrene						
Dibenz-a,h-anthracene						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Phenanthrene						
Benzo-g,h,i-perylene						
Bis (2-ethyl-hexyl) phthalate						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m) Residential	On-site (0 m) Construction Worker	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Lead (inorganic) *				
Benzo-a-pyrene	9,5E-10			
Dibenz-a,h-anthracene	3,5E-11			
TPH - Aliph >C21-C34	1,1E-4			
TPH - Arom >C21-C35	6,0E-6			
Phenanthrene	7,9E-8			
Benzo-g,h,i-perylene	8,8E-10			
Bis (2-ethyl-hexyl) phthalate	7,4E-10			

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT										
TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None		Residential	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1,2E-5				
Benzo-a-pyrene	TRUE	9,5E-10		-	-	8,8E-4	8,4E-10			
Dibenz-a,h-anthracene	TRUE	3,5E-11		-	-	8,8E-4	3,1E-11			
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =							8,7E-10			

Site Name: ACR Montesa
Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

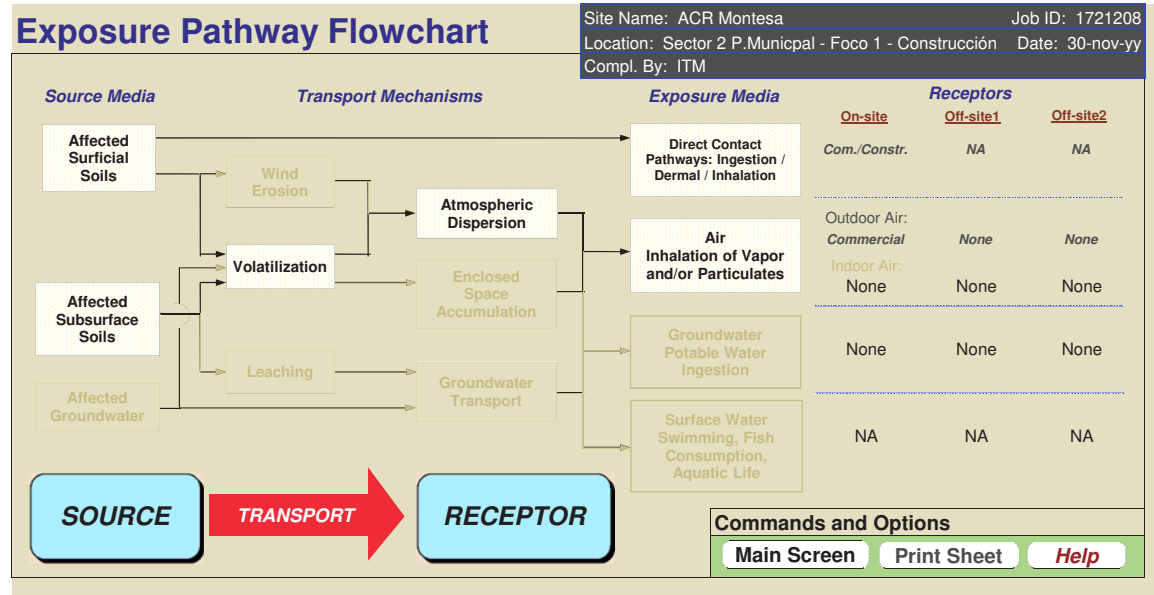
Job ID: 1721208

RBCA SITE ASSESSMENT										
TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Residential	Construction Worker	None	None		Residential	Construction Worker	None	None	
Lead (inorganic) *	0,0E+0				-					
Benzo-a-pyrene	2,2E-9				-					
Dibenz-a,h-anthracene	8,3E-11				-					
TPH - Aliph >C21-C34	1,1E-4				-					
TPH - Arom >C21-C35	6,0E-6				-					
Phenanthrene	7,9E-8				-					
Benzo-g,h,i-perylene	8,8E-10				-					
Bis (2-ethyl-hexyl) phthalate	7,4E-10				-					
Total Pathway Hazard Index =										

Site Name: ACR Montesa
Site Location: Sector 2 A: Municipal - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

1 OF 3

SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)

SURFACE SOILS: ON SITE INGESTION, DERMAL EXPOSURE

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	8,3E+1	1,2E-6	1,3E-7	1,0E-4	1,0E-5
Benzo-a-pyrene	9,9E-1	9,8E-7	5,5E-9	9,7E-7	5,5E-9
Dibenz-a,h-anthracene	3,2E-1	9,8E-7	5,5E-9	3,1E-7	1,8E-9
TPH - Aliph >C21-C34	7,4E+1	3,6E-6	4,9E-7	2,6E-4	3,6E-5
TPH - Arom >C21-C35	1,7E+2	2,7E-6	3,9E-7	4,8E-4	6,8E-5
Phenanthrene	4,6E-1	2,7E-6	3,9E-7	1,3E-6	1,8E-7
Benzo-g,h,i-perylene	8,2E-1	2,7E-6	3,9E-7	2,3E-6	3,2E-7
Bis (2-ethyl-hexyl) phthalate	1,0E-1	3,1E-6	1,6E-8	3,1E-7	1,6E-9

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION										2 OF 3
SOIL EXPOSURE PATHWAY										(Checked if Pathway is Complete)
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(5a) + (5b) + (2d)x(3b)		
		Commercial	Construction Worker	Commercial	Construction Worker					
Lead (inorganic) *	TRUE	1.5E-5	3.1E-5	1.4E-7	1.5E-7	8.5E-3	-	3.8E-7	2.4E-9	
Benzo-a-pyrene	TRUE	1.7E-7	8.0E-7	1.7E-9	3.8E-9	7.3E+0	7.3E+0	7.1E-6	4.0E-8	
Dibenz-a,h-anthracene	TRUE	5.6E-8	2.6E-7	5.4E-10	1.2E-9	7.3E+0	7.3E+0	2.3E-6	1.3E-8	
TPH - Aliph >C21-C34	FALSE			Missing Sfo	Tox?	-	-			
TPH - Arom >C21-C35	FALSE			Missing Sfo	Tox?	-	-			
Phenanthrene	FALSE			Missing Sfo	Tox?	-	-			
Benzo-g,h,i-perylene	FALSE			Missing Sfo	Tox?	-	-			
Bis (2-ethyl-hexyl) phthalate	TRUE	1.7E-8	2.9E-7	1.7E-10	1.4E-9	1.4E-2	1.4E-2	4.3E-9	2.2E-11	
* No dermal slope factor available--oral slope factor used.										
Total Pathway Carcinogenic Risk =										

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION										3 OF 3
SOIL EXPOSURE PATHWAY										(Checked if Pathway is Complete)
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk		Total Pathway Carcinogenic Risk =
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(5a) + (5b) + (2d)x(3b)		
		Commercial	Construction Worker	Commercial	Construction Worker					
Lead (inorganic) *	TRUE	1.5E-5	3.1E-5	1.4E-7	1.5E-7	8.5E-3	-	3.8E-7	2.4E-9	
Benzo-a-pyrene	TRUE	1.7E-7	8.0E-7	1.7E-9	3.8E-9	7.3E+0	7.3E+0	7.1E-6	4.0E-8	
Dibenz-a,h-anthracene	TRUE	5.6E-8	2.6E-7	5.4E-10	1.2E-9	7.3E+0	7.3E+0	2.3E-6	1.3E-8	
TPH - Aliph >C21-C34	FALSE			Missing Sfo	Tox?	-	-			
TPH - Arom >C21-C35	FALSE			Missing Sfo	Tox?	-	-			
Phenanthrene	FALSE			Missing Sfo	Tox?	-	-			
Benzo-g,h,i-perylene	FALSE			Missing Sfo	Tox?	-	-			
Bis (2-ethyl-hexyl) phthalate	TRUE	1.7E-8	2.9E-7	1.7E-10	1.4E-9	1.4E-2	1.4E-2	4.3E-9	2.2E-11	
* No dermal slope factor available--oral slope factor used.										
Total Pathway Carcinogenic Risk =										

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
SURFACE SOILS (0 - 1 m):									
VAPOR INHALATION	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Constituents of Concern									
Lead (inorganic) *	8,3E+1	Error							
Benzo-a-pyrene	9,9E-1	3,7E+7			2,7E-8				
Dibenz-a,h-anthracene	3,2E-1	3,2E+8			1,0E-9				
TPH - Aliph >C21-C34	7,4E+1	5,1E+4			1,5E-3				
TPH - Arom >C21-C35	1,7E+2	2,4E+6			7,3E-5				
Phenanthrene	4,6E-1	4,8E+5			9,6E-7				
Benzo-g,h,i-perylene	8,2E-1	7,7E+7			1,1E-8				
Bis (2-ethyl-hexyl) phthalate	1,0E-1	1,1E+7			8,9E-9				

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)														
SURFACE SOILS (0 - 1 m):														
VAPOR INHALATION (cont'd)	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)				4) Exposure Multiplier (EFxED)/(ATx365) (unitless)	5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Constituents of Concern														
Lead (inorganic) *	8,3E+1	Error							2,4E-1					
Benzo-a-pyrene	9,9E-1	3,7E+7			2,7E-8				2,4E-1				6,6E-9	
Dibenz-a,h-anthracene	3,2E-1	3,2E+8			1,0E-9				2,4E-1				2,5E-10	
TPH - Aliph >C21-C34	7,4E+1	5,1E+4			1,5E-3				6,8E-1				1,0E-3	
TPH - Arom >C21-C35	1,7E+2	2,4E+6			7,3E-5				6,8E-1				5,0E-5	
Phenanthrene	4,6E-1	4,8E+5			9,6E-7				6,8E-1				6,6E-7	
Benzo-g,h,i-perylene	8,2E-1	7,7E+7			1,1E-8				6,8E-1				7,3E-9	
Bis (2-ethyl-hexyl) phthalate	1,0E-1	1,1E+7			8,9E-9				6,8E-1				6,1E-9	

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)								
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION	1) Source Medium		2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	
		Commercial	None	None	Commercial	None	None	
Constituents of Concern								
Lead (inorganic) *	8,3E+1	VF samb						
Benzo-a-pyrene	9,9E-1	3,1E+10			3,2E-11			
Dibenz-a,h-anthracene	3,2E-1	2,3E+12			1,4E-13			
TPH - Aliph >C21-C34	7,4E+1	5,9E+4			1,3E-3			
TPH - Arom >C21-C35	1,7E+2	1,3E+8			1,4E-6			
Phenanthrene	4,6E-1	5,3E+6			8,7E-8			
Benzo-g,h,i-perylene	8,2E-1	1,4E+11			6,1E-12			
Bis (2-ethyl-hexyl) phthalate	1,0E-1	2,9E+9			3,5E-11			

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *	2,4E-1					
Benzo-a-pyrene	2,4E-1			7,9E-12		
Dibenz-a,h-anthracene	2,4E-1			3,4E-14		
TPH - Aliph >C21-C34	6,8E-1			8,6E-4		
TPH - Arom >C21-C35	6,8E-1			9,3E-7		
Phenanthrene	6,8E-1			6,0E-8		
Benzo-g,h,i-perylene	6,8E-1			4,1E-12		
Bis (2-ethyl-hexyl) phthalate	6,8E-1			2,4E-11		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m) None	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) None	Off-site 1 (0 m) None	Off-site 2 (0 m) None
Constituents of Concern							
Lead (inorganic) *							
Benzo-a-pyrene							
Dibenz-a,h-anthracene							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Phenanthrene							
Benzo-g,h,i-perylene							
Bis (2-ethyl-hexyl) phthalate							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
Benzo-a-pyrene						
Dibenz-a,h-anthracene						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Phenanthrene						
Benzo-g,h,i-perylene						
Bis (2-ethyl-hexyl) phthalate						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Lead (inorganic) *	6,6E-9			
Benzo-a-pyrene	2,5E-10			
Dibenz-a,h-anthracene	1,0E-3			
TPH - Aliph >C21-C34	5,0E-5			
TPH - Arom >C21-C35	6,6E-7			
Phenanthrene	7,3E-9			
Benzo-g,h,i-perylene	6,1E-9			
Bis (2-ethyl-hexyl) phthalate				

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1,2E-5				
Benzo-a-pyrene	TRUE	6,6E-9		-	-	8,8E-4	5,8E-9			
Dibenz-a,h-anthracene	TRUE	2,5E-10		-	-	8,8E-4	2,2E-10			
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =							6,0E-9			

Site Name: ACR Montesa
 Site Location: Sector 2 P.Municipal - Foco 1 - Construcción

Completed By: ITM
 Date Completed: 30-nov-yy

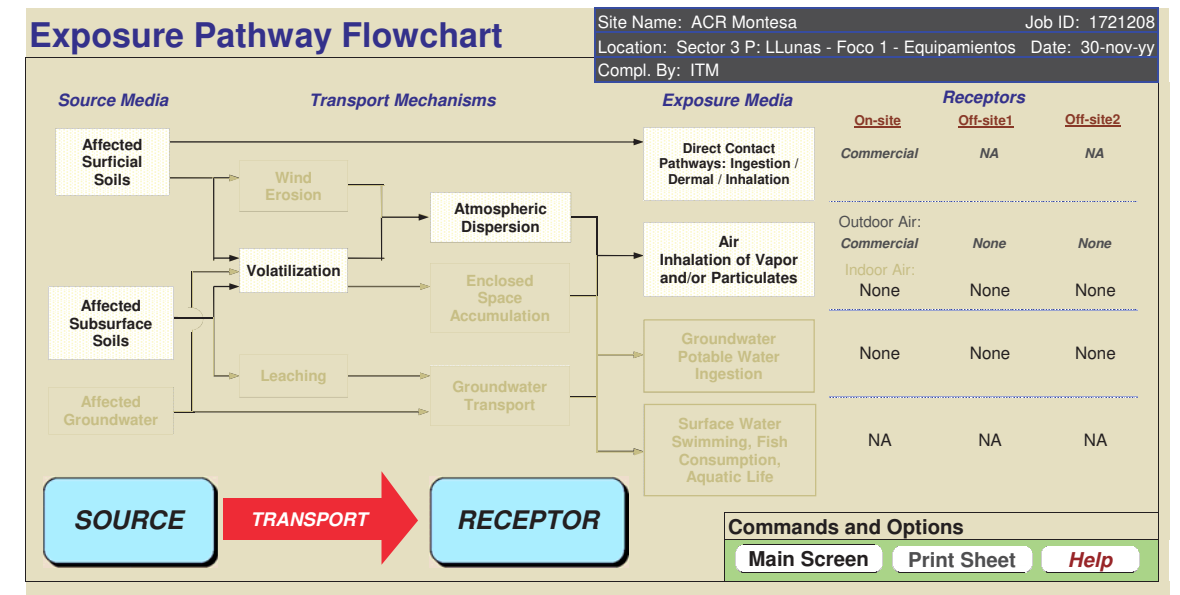
Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
Benzo-a-pyrene	1,9E-8				-				
Dibenz-a,h-anthracene	6,9E-10				-				
TPH - Aliph >C21-C34	1,0E-3				-				
TPH - Arom >C21-C35	5,0E-5				-				
Phenanthrene	6,6E-7				-				
Benzo-g,h,i-perylene	7,3E-9				-				
Bis (2-ethyl-hexyl) phthalate	6,1E-9				-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 2 P.Municipal - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)					
Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	1,7E+2	2,9E-8		4,9E-6	-
TPH - Aliph >C21-C34	7,4E+1	8,6E-8		6,4E-6	-
TPH - Arom >C21-C35	1,7E+2	6,6E-8		1,1E-5	-
Benzo-g,h,i-perylene	2,2E-1	6,6E-8		1,5E-8	-
Permethrin	5,1E-1	Veg?		-	-

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Job ID: 1721208
Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
		Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	TRUE	7,1E-7	1,5E-6			8,5E-3	-	1,9E-8	-
TPH - Aliph >C21-C34	FALSE					-	-	-	-
TPH - Arom >C21-C35	FALSE					-	-	-	-
Benzo-g,h,i-perylene	FALSE					-	-	-	-
Permethrin	TRUE	2,1E-9	RAF?			9,6E-3	-	2,0E-11	-
Total Pathway Carcinogenic Risk =								1,9E-8	

* No dermal slope factor available—oral slope factor used.

Site Name: ACR Montesa Date Completed: 30-nov-yy
Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Job ID: 1721208
Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION								3 OF 3
SOIL EXPOSURE PATHWAY								(Checked if Pathway is Complete)
Constituents of Concern	(5) Total Toxicant Intake Rate (mg/kg/day)				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient	
	(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b)	(5c)/(6a) + (5d)/(6b)
	Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	Tox?	Tox?			-	-	4.0E-6	
TPH - Aliph >C21-C34	8.7E-7	5.5E-6			1.6E+0	1.6E+0		
TPH - Arom >C21-C35	2.0E-6	9.4E-6			3.0E-2	3.0E-2	3.8E-4	
Benzo-g,h,i-perylene	2.6E-9	1.2E-8			3.0E-2	3.0E-2	4.8E-7	
Permethrin	6.0E-9	No abs.d/URC.s			5.0E-2	5.0E-2	1.2E-7	
* No dermal reference dose available--oral reference dose used.								
Total Pathway Hazard Index =								3.9E-4

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT								1 OF 9
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								(Checked if Pathway is Complete)
Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	
Lead (inorganic) *	1.7E+2	Error						
TPH - Aliph >C21-C34	7.4E+1	5.6E+4			1.3E-3			
TPH - Arom >C21-C35	1.7E+2	2.4E+6			7.3E-5			
Benzo-g,h,i-perylene	2.2E-1	7.7E+7			2.9E-9			
Permethrin	5.1E-1	Error						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
SURFACE SOILS (0.3 - 1 m):								
VAPOR INHALATION (cont'd)								
Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (d) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Lead (inorganic) *	5,9E-3							
TPH - Aliph >C21-C34	1,6E-2				2,2E-5			
TPH - Arom >C21-C35	1,6E-2				1,2E-6			
Benzo-g,h,i-perylene	1,6E-2				4,7E-11			
Permethrin	1,6E-2							

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m):							
VAPOR INHALATION							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	None	None	Commercial	None	None
Lead (inorganic) *	1,7E+2	VFsamb					
TPH - Aliph >C21-C34	7,4E+1	5,9E+4			1,3E-3		
TPH - Arom >C21-C35	1,7E+2	1,3E+8			1,4E-6		
Benzo-g,h,i-perylene	2,2E-1	1,4E+11			1,6E-12		
Permethrin	5,1E-1	5,6E+4			9,2E-6		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *	5,9E-3					
TPH - Aliph >C21-C34	1,6E-2			2,1E-5		
TPH - Arom >C21-C35	1,6E-2			2,2E-8		
Benzo-g,h,i-perylene	1,6E-2			2,7E-14		
Permethrin	1,6E-2			1,5E-7		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern							
Lead (inorganic) *							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Benzo-g,h,i-perylene							
Permethrin							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Benzo-g,h,i-perylene						
Permethrine						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Constituents of Concern				
Lead (inorganic) *				
TPH - Aliph >C21-C34	2,2E-5			
TPH - Arom >C21-C35	1,2E-6			
Benzo-g,h,i-perylene	4,7E-11			
Permethrine	1,5E-7			

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT										
TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE	-	-	-	-	1,2E-5				
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Permetrine	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =										

Site Name: ACR Montesa
Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

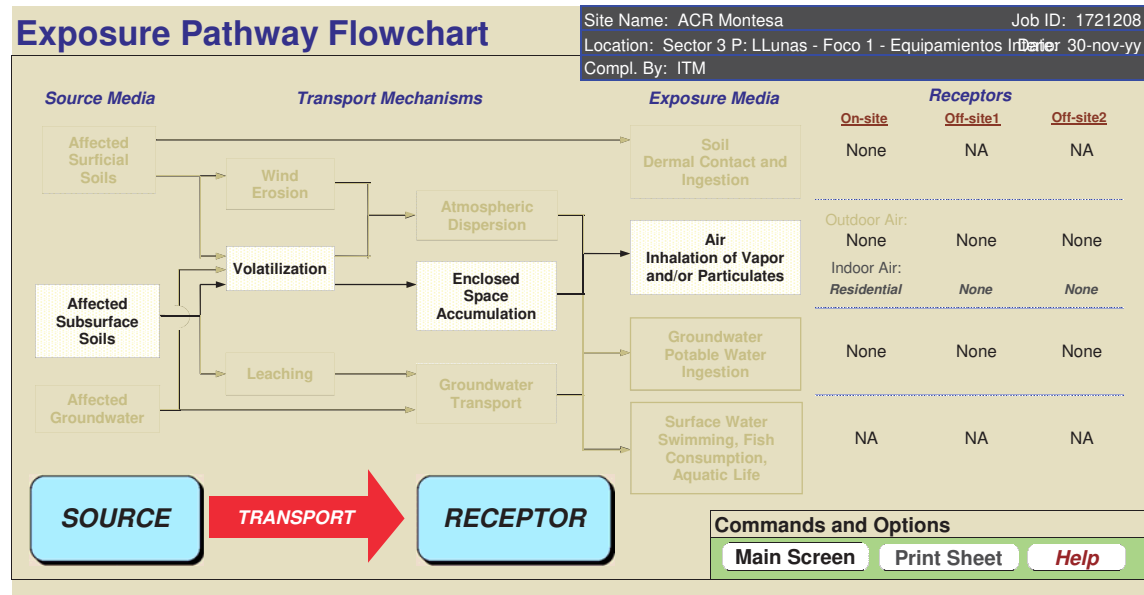
Job ID: 1721208

RBCA SITE ASSESSMENT										
TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None	
Lead (inorganic) *	0,0E+0				-					
TPH - Aliph >C21-C34	2,2E-5				-					
TPH - Arom >C21-C35	1,2E-6				-					
Benzo-g,h,i-perylene	4,7E-11				-					
Permetrine	1,5E-7				-					
Total Pathway Hazard Index =										

Site Name: ACR Montesa
Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



RBCA SITE ASSESSMENT

1 OF 8

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

SOILS (0.3 - 1.3 m): VAPOR
 INTRUSION INTO BUILDINGS

Constituents of Concern	1) Source Medium	2) NAF Value (L/kg) Receptor	3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)	5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)
	Soil Conc. (mg/kg)	On-site (0 m) Residential	On-site (0 m) Residential	On-site (0 m) Residential	On-site (0 m) Residential
Lead (inorganic) *	1.7E+2	zero VF		1.5E-1	
TPH - Aliph >C21-C34	7.4E+1	4.7E+4	1.6E-3	3.4E-1	5.4E-4
TPH - Arom >C21-C35	1.7E+2	1.0E+8	1.7E-6	3.4E-1	5.9E-7
Benzo-g,h,i-penylene	2.2E-1	1.9E+10	1.2E-11	3.4E-1	4.0E-12
Permethrin	5.1E-1	1.6E+2	3.3E-3	3.4E-1	1.1E-3

* = Chemical with user-specified data
 NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT							
2 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS							
	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /3L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern		None	None	None	None	None	None
Lead (inorganic) *							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Benzo-g,h,i-perylene							
Permethrin							
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT						
3 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS						
	Exposure Concentration					
	1) Source Medium	2) NAF Value (m ³ /3L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)
Constituents of Concern		None	None	None	None	None
Lead (inorganic) *						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Benzo-g,h,i-perylene						
Permethrin						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208		

RBCA SITE ASSESSMENT							
4 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS							
	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /3L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern		None	None	None	None	None	None
Lead (inorganic) *	1,7E+2						
TPH - Aliph >C21-C34	7,4E+1						
TPH - Arom >C21-C35	1,7E+2						
Benzo-g,h,i-perylene	2,2E-1						
Permethrin	5,1E-1						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT							
5 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS							
	Exposure Concentration						
	1) Source Medium	2) NAF Value (m ³ /3L) Receptor			4) Exposure Multiplier (EF*ED)/(AT*365) (unitless)		5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern		None	None	None	None	None	None
Lead (inorganic) *							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Benzo-g,h,i-perylene							
Permethrin							
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT			
6 OF 8			
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION			
INDOOR AIR EXPOSURE PATHWAYS			
MAXIMUM PATHWAY EXPOSURE (mg/m ³) (Maximum average exposure concentration from soil and groundwater routes.)			
Constituents of Concern	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	None	None
Lead (inorganic) *			
TPH - Aliph >C21-C34	5,4E-4		
TPH - Arom >C21-C35	5,9E-7		
Benzo-g,h,i-perylene	4,0E-12		
Permethrine	1,1E-3		

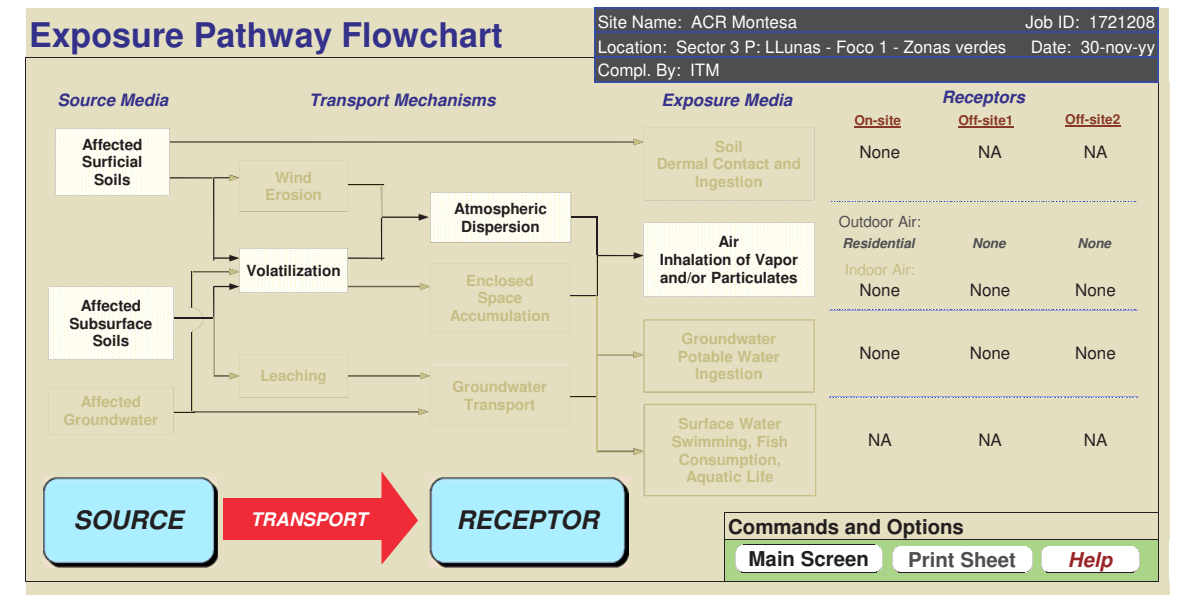
Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT								
7 OF 8								
TIER 2 PATHWAY RISK CALCULATION								
INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)								
Constituents of Concern	(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m ³)			(3) Inhalation Unit Risk Factor (µg/m ⁻³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	None	None		Residential	None	None
Lead (inorganic) *	TRUE	-	-	-	1,2E-5			
TPH - Aliph >C21-C34	FALSE	-	-	-	-			
TPH - Arom >C21-C35	FALSE	-	-	-	-			
Benzo-g,h,i-perylene	FALSE	-	-	-	-			
Permethrine	FALSE	-	-	-	-			

Total Pathway Carcinogenic Risk =

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT							
TIER 2 PATHWAY RISK CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)							
Constituents of Concern	TOXIC EFFECTS (5) Maximum Toxicant Exposure (mg/m ³)			(6) Inhalation Reference Concentration (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	None	None		Residential	None	None
Lead (inorganic)	0.0E+0	NC	NC	-			
TPH - Aliph >C21-C34	5.4E-4	NC	NC	-			
TPH - Arom >C21-C35	5.9E-7	NC	NC	-			
Benzo-g,h,i-perylene	4.0E-12	NC	NC	-			
Permetrine	1.1E-3	NC	NC	-			
Total Pathway Hazard Index = <input type="text"/>							
Site Name: ACR Montesa Site Location: Sector 3 P: LLunas - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			



RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
SURFACE SOILS (0.3 - 1 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
	Soil Conc. (mg/kg)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
Constituents of Concern									
Lead (inorganic) *	1,7E+2	Error							
TPH - Aliph >C21-C34	4,4E+1	5,6E+4			8,0E-4				
TPH - Arom >C21-C35	1,0E+2	2,4E+6			4,4E-5				
Benzo-g,h,i-perylene	2,2E-1	7,7E+7			2,9E-9				
Permethrine	5,1E-1	Error							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS									
SURFACE SOILS (0.3 - 1 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)				
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None	Residential	Construction Worker	None	None	None
Constituents of Concern									
Lead (inorganic) *	3,5E-2								
TPH - Aliph >C21-C34	8,2E-2				6,6E-5				
TPH - Arom >C21-C35	8,2E-2				3,6E-6				
Benzo-g,h,i-perylene	8,2E-2				2,4E-10				
Permethrine	8,2E-2								

* = Chemical with user-specified data
 NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Constituents of Concern						
Lead (inorganic) *	1,7E+2	VF samb			7,6E-4		
TPH - Aliph >C21-C34	4,4E+1	5,9E+4					
TPH - Arom >C21-C35	1,0E+2	1,3E+8			8,1E-7		
Benzo-g,h,i-perylene	2,2E-1	1,4E+11			1,6E-12		
Permetrine	5,1E-1	5,6E+4			9,2E-6		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

4 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None	On-site (0 m) Residential	Off-site 1 (0 m) None	Off-site 2 (0 m) None
	Constituents of Concern					
Lead (inorganic) *	3,5E-2					
TPH - Aliph >C21-C34	8,2E-2			6,2E-5		
TPH - Arom >C21-C35	8,2E-2			6,7E-8		
Benzo-g,h,i-perylene	8,2E-2			1,3E-13		
Permetrine	8,2E-2			7,5E-7		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Lead (inorganic) *							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Benzo-g,h,i-perylene							
Permethrine							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern	None	None	None	None	None	None
Lead (inorganic) *						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Benzo-g,h,i-perylene						
Permethrine						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT				
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None
Lead (inorganic) *				
TPH - Aliph >C21-C34	6,6E-5			
TPH - Arom >C21-C35	3,6E-6			
Benzo-g,h,i-perylene	2,4E-10			
Permetrine	7,5E-7			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		
		Residential	Construction Worker	None	None		Residential	Construction Worker	Off-site 1 (0 m)
Lead (inorganic) *	TRUE			-	-	1,2E-5			
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-			
TPH - Arom >C21-C35	FALSE	-	-	-	-	-			
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-			
Permetrine	FALSE	-	-	-	-	-			
Total Pathway Carcinogenic Risk =									

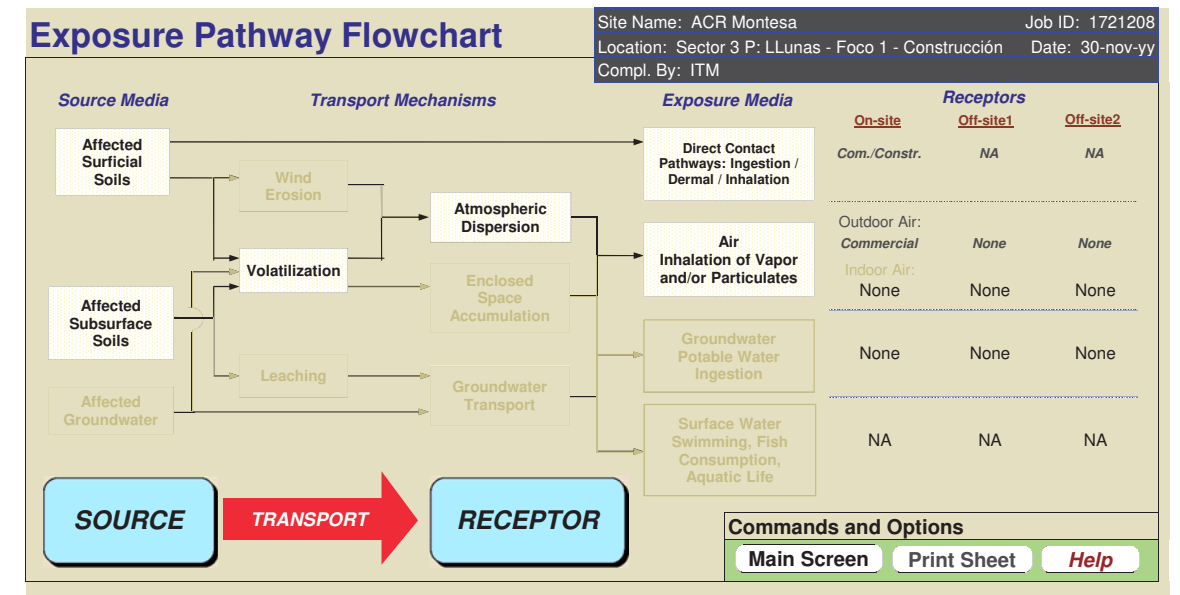
Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None		Residential	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
TPH - Aliph >C21-C34	6,6E-5				-				
TPH - Arom >C21-C35	3,6E-6				-				
Benzo-g,h,i-perylene	2,4E-10				-				
Permetrine	7,5E-7				-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 3 P: LLunas - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)					
Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	1,7E+2	1,2E-6	8,4E-8	2,0E-4	1,4E-5
TPH - Aliph >C21-C34	4,4E+1	3,6E-6	3,3E-7	1,6E-4	1,4E-5
TPH - Arom >C21-C35	1,0E+2	2,7E-6	2,6E-7	2,9E-4	2,7E-5
Benzo-g,h,i-perylene	2,2E-1	2,7E-6	2,6E-7	6,0E-7	5,7E-8
Permethrin	5,1E-1	Veg?	Error	-	-

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
Site Location: Sector 3 P: LLunas - Foco 1 - Construcción Job ID: 1721208
Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
		Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	TRUE	3,0E-5	6,3E-5	1,9E-7	2,0E-7	8,5E-3	-	7,8E-7	3,3E-9
TPH - Aliph >C21-C34	FALSE			Missing Sfo	Tox?	-	-		
TPH - Arom >C21-C35	FALSE			Missing Sfo	Tox?	-	-		
Benzo-g,h,i-perylene	FALSE			Missing Sfo	Tox?	-	-		
Permethrin	TRUE	8,9E-8	RAFd?	5,7E-10	RAFd?	9,6E-3	-	8,5E-10	5,5E-12
Total Pathway Carcinogenic Risk =								7,9E-7	3,3E-9

* No dermal slope factor available—oral slope factor used.

Site Name: ACR Montesa Date Completed: 30-nov-yy
Site Location: Sector 3 P: LLunas - Foco 1 - Construcción Job ID: 1721208
Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION 3 OF 3									
SOIL EXPOSURE PATHWAY ■ (Checked if Pathway is Complete)									
Constituents of Concern	(5) Total Toxicant Intake Rate (mg/kg/day)				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient		
	(a) via Ingestion		(b) via Dermal Contact		(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b)	(5c)/(6a) + (5d)/(6b)	
	Commercial	Construction Worker	Commercial	Construction Worker			Commercial	Construction Worker	
Lead (inorganic) *	Tox?	Tox?	Missing RfD	Missing RfD	-	-	9.9E-5	9.0E-6	
TPH - Aliph >C21-C34	2.2E-5	1.4E-4	3.5E-6	1.1E-5	1.6E+0	1.6E+0	9.9E-5	9.0E-6	
TPH - Arom >C21-C35	5.1E-5	2.4E-4	8.2E-6	1.9E-5	3.0E-2	3.0E-2	9.6E-3	9.0E-4	
Benzo-g,h,i-perylene	1.1E-7	5.0E-7	1.7E-8	4.0E-8	3.0E-2	3.0E-2	2.0E-5	1.9E-6	
Permethrin	2.5E-7	No abs.d/URC.s	4.0E-8	#VALUE!	5.0E-2	5.0E-2	5.0E-6	8.0E-7	
* No dermal reference dose available--oral reference dose used.									
Total Pathway Hazard Index =								9.7E-3	9.1E-4

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT 1 OF 9									
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)									
Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Lead (inorganic) *	1.7E+2	Error							
TPH - Aliph >C21-C34	4.4E+1	5.6E+4			8.0E-4				
TPH - Arom >C21-C35	1.0E+2	2.4E+6			4.4E-5				
Benzo-g,h,i-perylene	2.2E-1	7.7E+7			2.9E-9				
Permethrin	5.1E-1	Error							

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Lead (inorganic) *	2,4E-1				5,5E-4			
TPH - Aliph >C21-C34	6,8E-1				3,0E-5			
TPH - Arom >C21-C35	6,8E-1				2,0E-9			
Benzo-g,h,i-perylene	6,8E-1							
Permethrin	6,8E-1							

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	None	None	Commercial	None	None
Lead (inorganic) *	1,7E+2	VFsamb					
TPH - Aliph >C21-C34	4,4E+1	5,9E+4			7,6E-4		
TPH - Arom >C21-C35	1,0E+2	1,3E+8			8,1E-7		
Benzo-g,h,i-perylene	2,2E-1	1,4E+11			1,6E-12		
Permethrin	5,1E-1	5,6E+4			9,2E-6		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

4 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *	2,4E-1			5,2E-4		
TPH - Aliph >C21-C34	6,8E-1					
TPH - Arom >C21-C35	6,8E-1			5,6E-7		
Benzo-g,h,i-perylene	6,8E-1			1,1E-12		
Permetrine	6,8E-1			6,3E-6		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium		
	1) Source Medium	2) NAF Value (m ³ /L) Receptor		Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)
Constituents of Concern						
Lead (inorganic) *		None	None	None	None	None
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Benzo-g,h,i-perylene						
Permetrine						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Benzo-g,h,i-perylene						
Permethrine						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Constituents of Concern				
Lead (inorganic) *				
TPH - Aliph >C21-C34	5,5E-4			
TPH - Arom >C21-C35	3,0E-5			
Benzo-g,h,i-perylene	2,0E-9			
Permethrine	6,3E-6			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 P: LLunas - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT										
TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE	-	-	-	-	1,2E-5				
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Benzo-g,h,i-perylene	FALSE	-	-	-	-	-				
Permetrine	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =										

Site Name: ACR Montesa
Site Location: Sector 3 P: LLunas - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

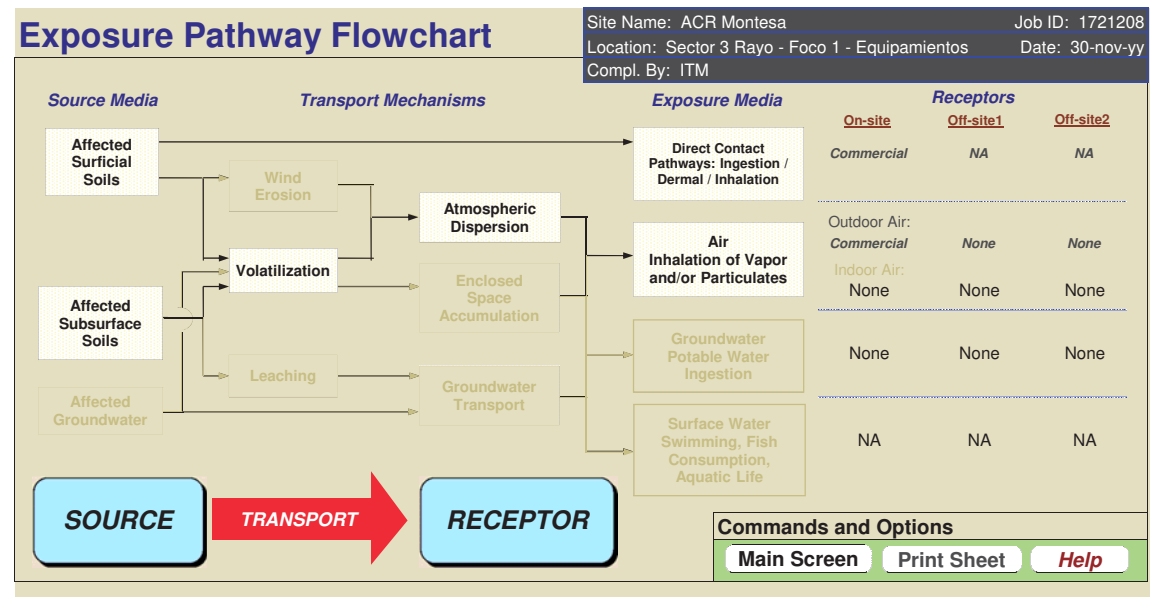
Job ID: 1721208

RBCA SITE ASSESSMENT										
TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)	(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)							
			On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)				
			Commercial	Construction Worker	None	None				
Lead (inorganic) *	0,0E+0	-								
TPH - Aliph >C21-C34	5,5E-4	-								
TPH - Arom >C21-C35	3,0E-5	-								
Benzo-g,h,i-perylene	2,0E-9	-								
Permetrine	6,3E-6	-								
Total Pathway Hazard Index =										

Site Name: ACR Montesa
Site Location: Sector 3 P: LLunas - Foco 1 - Construcción

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

1 OF 3

SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)

SURFACE SOILS: ON SITE INGESTION, DERMAL EXPOSURE

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	6.3E+1	2.9E-8		1.8E-6	-
Bis (2-ethyl-hexyl) phthalate	4.1E-1	7.4E-8		3.0E-8	-
Copper	5.9E+2	1.8E-8		1.1E-5	-
TPH - Aliph >C21-C34	4.4E+1	8.6E-8		3.8E-6	-
TPH - Arom >C21-C35	1.0E+2	6.6E-8		6.9E-6	-
Phenanthrene	2.0E-1	6.6E-8		1.3E-8	-

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b) (2c)x(3a) + (2d)x(3b)	
		Commercial	Construction Worker	Commercial	Construction Worker				
Lead (inorganic) *	TRUE	2.6E-7	5.6E-7			8.5E-3	-	7.0E-9	-
Bis (2-ethyl-hexyl) phthalate	TRUE	1.7E-9	2.9E-8			1.4E-2	1.4E-2	4.2E-10	-
Copper	FALSE					-	-	-	-
TPH - Aliph >C21-C34	FALSE					-	-	-	-
TPH - Arom >C21-C35	FALSE					-	-	-	-
Phenanthrene	FALSE					-	-	-	-
* No dermal slope factor available—oral slope factor used.								Total Pathway Carcinogenic Risk = 7.4E-9	

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Total Toxicant Intake Rate (mg/kg/day)				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient		
	(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b) (5c)/(6a) + (5d)/(6b)		
	Commercial	Construction Worker	Commercial	Construction Worker			Commercial	Construction Worker	
Lead (inorganic) *	Tox?	Tox?			-	-			
Bis (2-ethyl-hexyl) phthalate	4.8E-9	8.0E-8			2.0E-2	2.0E-2	4.2E-6		
Copper	6.9E-6	3.8E-6			4.0E-2	4.0E-2	2.7E-4		
TPH - Aliph >C21-C34	5.2E-7	3.3E-6			1.6E+0	1.6E+0	2.4E-6		
TPH - Arom >C21-C35	1.2E-6	5.7E-6			3.0E-2	3.0E-2	2.3E-4		
Phenanthrene	2.3E-9	1.1E-8			3.0E-2	3.0E-2	4.4E-7		
* No dermal reference dose available—oral reference dose used.								Total Pathway Hazard Index = 5.1E-4	

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
SURFACE SOILS (0 - 1 m):									
VAPOR INHALATION	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Constituents of Concern									
Lead (inorganic) *	6,3E+1	Error							
Bis (2-ethyl-hexyl) phthalate	4,1E-1	1,1E+7			3,7E-8				
Copper	5,9E+2	Error							
TPH - Aliph >C21-C34	4,4E+1	5,6E+4			8,0E-4				
TPH - Arom >C21-C35	1,0E+2	2,4E+6			4,4E-5				
Phenanthrene	2,0E-1	4,8E+5			4,2E-7				

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS															
SURFACE SOILS (0 - 1 m):															
VAPOR INHALATION (cont'd)	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)				4) Exposure Multiplier (EF*ED)/(AT*365) (unitless)		5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None		
Constituents of Concern															
Lead (inorganic) *	6,3E+1	Error							5,9E-3						
Bis (2-ethyl-hexyl) phthalate	4,1E-1	1,1E+7			3,7E-8				1,6E-2				6,0E-10		
Copper	5,9E+2	Error							1,6E-2						
TPH - Aliph >C21-C34	4,4E+1	5,6E+4			8,0E-4				1,6E-2				1,3E-5		
TPH - Arom >C21-C35	1,0E+2	2,4E+6			4,4E-5				1,6E-2				7,2E-7		
Phenanthrene	2,0E-1	4,8E+5			4,2E-7				1,6E-2				6,8E-9		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	None	None	Commercial	None	None
Constituents of Concern							
Lead (inorganic) *	6.3E+1						
Bis (2-ethyl-hexyl) phthalate	4.1E-1						
Copper	5.9E+2						
TPH - Aliph >C21-C34	4.4E+1						
TPH - Arom >C21-C35	1.0E+2						
Phenanthrene	2.0E-1						

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

4 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *						
Bis (2-ethyl-hexyl) phthalate						
Copper						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Phenanthrene						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Lead (inorganic) *							
Bis (2-ethyl-hexyl) phthalate							
Copper							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Phenanthrene							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
Bis (2-ethyl-hexyl) phthalate						
Copper						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Phenanthrene						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Lead (inorganic) *				
Bis (2-ethyl-hexyl) phthalate	6.0E-10			
Copper				
TPH - Aliph >C21-C34	1.3E-5			
TPH - Arom >C21-C35	7.2E-7			
Phenanthrene	6.8E-9			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1.2E-5				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Copper	FALSE	-	-	-	-	-				
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =										

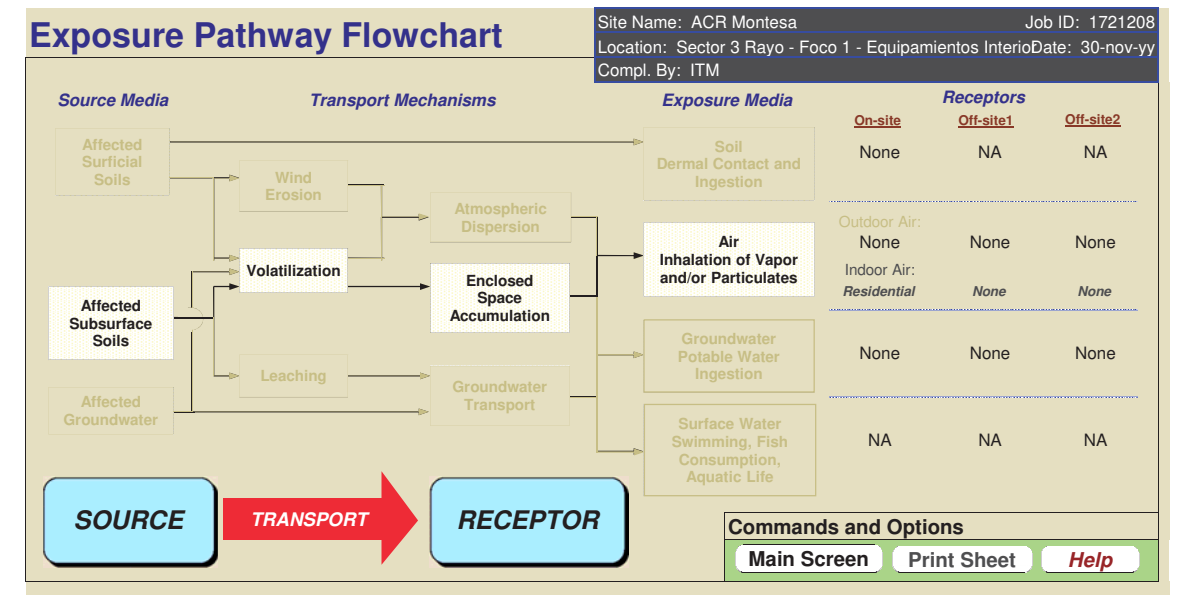
Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT									
TIER 2 PATHWAY RISK CALCULATION									
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
Bis (2-ethyl-hexyl) phthalate	6,0E-10				-				
Copper					-				
TPH - Aliph >C21-C34	1,3E-5				-				
TPH - Arom >C21-C35	7,2E-7				-				
Phenanthrene	6,8E-9				-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
Site Location: Sector 3 Rayo - Foco 1 - Equipamientos

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



RBCA SITE ASSESSMENT					
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION					
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)					
SOILS (0 - 1 m): VAPOR					
INTRUSION INTO BUILDINGS	1) Source Medium	2) NAF Value (L/kg) Receptor	3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)	5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)
		On-site (0 m)	On-site (0 m)	On-site (0 m)	On-site (0 m)
Constituents of Concern	Soil Conc. (mg/kg)	Residential	Residential	Residential	Residential
Lead (inorganic) *	6.3E+1	zero VF		1.5E-1	
Bis (2-ethyl-hexyl) phthalate	4.1E-1	2.2E+9	1.8E-10	3.4E-1	6.2E-11
Copper	5.9E+2	zero VF		3.4E-1	
TPH - Aliph >C21-C34	4.4E+1	4.7E+4	9.5E-4	3.4E-1	3.2E-4
TPH - Arom >C21-C35	1.0E+2	1.0E+8	1.0E-6	3.4E-1	3.5E-7
Phenanthrene	2.0E-1	4.2E+6	4.7E-8	3.4E-1	1.6E-8
* = Chemical with user-specified data					
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure					
Site Name: ACR Montesa Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior Completed By: ITM			Date Completed: 30-nov-yy Job ID: 1721208		

RBCA SITE ASSESSMENT							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INTRUSION							
INTRUSION INTO BUILDINGS	Exposure Concentration		2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	
	1) Source Medium	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m) / Off-site 2 (0 m)
Constituents of Concern			None	None	None	None	None
Lead (inorganic) *							
Bis (2-ethyl-hexyl) phthalate							
Copper							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Phenanthrene							
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior Completed By: ITM				Date Completed: 30-nov-yy Job ID: 1721208			

RBCA SITE ASSESSMENT						
3 OF 8						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS						
Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Lead (inorganic) *						
Bis (2-ethyl-hexyl) phthalate						
Copper						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Phenanthrene						
* = Chemical with user-specified data						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa			Date Completed: 30-nov-yy			
Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior			Job ID: 1721208			
Completed By: ITM						

RBCA SITE ASSESSMENT							
4 OF 8							
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
INDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS							
Constituents of Concern	Exposure Concentration		2) NAF Value (m ³ /L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m ³) (1) / (2)	
	1) Source Medium Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		None	None	None	None	None	None
Lead (inorganic) *	6,3E+1						
Bis (2-ethyl-hexyl) phthalate	4,1E-1						
Copper	5,9E+2						
TPH - Aliph >C21-C34	4,4E+1						
TPH - Arom >C21-C35	1,0E+2						
Phenanthrene	2,0E-1						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure							
Site Name: ACR Montesa			Date Completed: 30-nov-yy				
Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior			Job ID: 1721208				
Completed By: ITM							

RBCA SITE ASSESSMENT						
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
INDOOR AIR EXPOSURE PATHWAYS						
SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS						
Constituents of Concern	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Lead (inorganic) *	None	None	None	None	None	None
Bis (2-ethyl-hexyl) phthalate						
Copper						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Phenanthrene						
* = Chemical with user-specified data						
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure						
Site Name: ACR Montesa Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior Completed By: ITM			Date Completed: 30-nov-yy Job ID: 1721208			

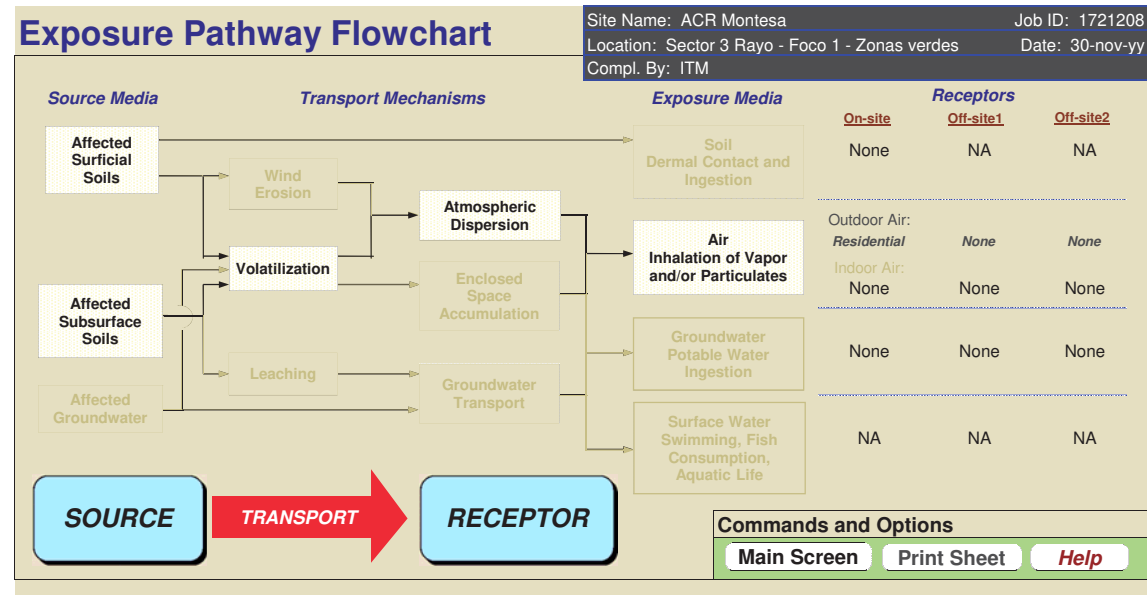
5 OF 8

RBCA SITE ASSESSMENT			
TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION			
INDOOR AIR EXPOSURE PATHWAYS			
MAXIMUM PATHWAY EXPOSURE (mg/m ³) (Maximum average exposure concentration from soil and groundwater routes)			
Constituents of Concern	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	None	None
Lead (inorganic) *			
Bis (2-ethyl-hexyl) phthalate	6,2E-11		
Copper			
TPH - Aliph >C21-C34	3,2E-4		
TPH - Arom >C21-C35	3,5E-7		
Phenanthrene	1,6E-8		
NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure			
Site Name: ACR Montesa Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior Completed By: ITM		Date Completed: 30-nov-yy Job ID: 1721208	

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RBCA SITE ASSESSMENT										
									7 OF 8	
TIER 2 PATHWAY RISK CALCULATION										
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
CARCINOGENIC RISK										
Constituents of Concern	(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m ³)			(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000				
		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		
		Residential	None	None		Residential	None	None		
Lead (inorganic) *	TRUE	-	-	-	1,2E-5					
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-					
Copper	FALSE	-	-	-	-					
TPH - Aliph >C21-C34	FALSE	-	-	-	-					
TPH - Arom >C21-C35	FALSE	-	-	-	-					
Phenanthrene	FALSE	-	-	-	-					
Total Pathway Carcinogenic Risk = <input type="text"/>										
Site Name: ACR Montesa Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior Completed By: ITM					Date Completed: 30-nov-yy Job ID: 1721208					

RBCA SITE ASSESSMENT									
									8 OF 8
TIER 2 PATHWAY RISK CALCULATION									
INDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
TOXIC EFFECTS									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)			(6) Inhalation Reference Concentration (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)		
	Residential	None	None		Residential	None	None		
Lead (inorganic) *	0,0E+0	NC	NC	-					
Bis (2-ethyl-hexyl) phthalate	6,2E-11	NC	NC	-					
Copper	-	NC	NC	-					
TPH - Aliph >C21-C34	3,2E-4	NC	NC	-					
TPH - Arom >C21-C35	3,5E-7	NC	NC	-					
Phenanthrene	1,6E-8	NC	NC	-					
Total Pathway Hazard Index = <input type="text"/>									
Site Name: ACR Montesa Site Location: Sector 3 Rayo - Foco 1 - Equipamientos Interior Completed By: ITM					Date Completed: 30-nov-yy Job ID: 1721208				



RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS (Checked if Pathway is Complete)

SURFACE SOILS (0.3 - 1 m):

VAPOR INHALATION

Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m³/kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
Lead (inorganic) *	5,5E+1	Error							
Bis (2-ethyl-hexyl) phthalate	4,1E-1	1,1E+7				3,7E-8			
Copper	5,9E+2	Error							
TPH - Aliph >C21-C34	4,4E+1	5,6E+4				8,0E-4			
TPH - Arom >C21-C35	1,0E+2	2,4E+6				4,4E-5			
Phenanthrene	2,0E-1	4,8E+5				4,2E-7			

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION								
OUTDOOR AIR EXPOSURE PATHWAYS								
Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m ³) (d) X (4)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None	Residential	Construction Worker	None	None
Lead (inorganic) *	3,5E-2							
Bis (2-ethyl-hexyl) phthalate	8,2E-2				3,0E-9			
Copper	8,2E-2							
TPH - Aliph >C21-C34	8,2E-2				6,6E-5			
TPH - Arom >C21-C35	8,2E-2				3,6E-6			
Phenanthrene	8,2E-2				3,4E-8			

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)							
Constituents of Concern	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	None	None	Residential	None	None
Lead (inorganic) *	5,5E+1	VFsamb					
Bis (2-ethyl-hexyl) phthalate	4,1E-1	2,9E+9			1,4E-10		
Copper	5,9E+2	VFsamb					
TPH - Aliph >C21-C34	4,4E+1	5,9E+4			7,6E-4		
TPH - Arom >C21-C35	1,0E+2	1,3E+8			8,1E-7		
Phenanthrene	2,0E-1	5,3E+6			3,8E-8		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m):						
VAPOR INHALATION (cont'd)						
	4) Exposure Multiplier (EF×ED)/(AT×365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	Residential	None	None	Residential	None	None
Lead (inorganic) *	3,5E-2					
Bis (2-ethyl-hexyl) phthalate	8,2E-2			1,2E-11		
Copper	8,2E-2					
TPH - Aliph >C21-C34	8,2E-2			6,2E-5		
TPH - Arom >C21-C35	8,2E-2			6,7E-8		
Phenanthrene	8,2E-2			3,1E-9		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR							
INHALATION							
	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
Constituents of Concern	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Lead (inorganic) *		None	None	None	None	None	None
Bis (2-ethyl-hexyl) phthalate							
Copper							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Phenanthrene							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EF×ED) _i (AT×365) _i (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
Bis (2-ethyl-hexyl) phthalate						
Copper						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Phenanthrene						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
Constituents of Concern	MAXIMUM PATHWAY EXPOSURE (mg/m ³) Maximum average exposure concentration from soil and groundwater routes.)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Residential	Construction Worker	None	None
Constituents of Concern				
Lead (inorganic) *				
Bis (2-ethyl-hexyl) phthalate	3,0E-9			
Copper				
TPH - Aliph >C21-C34	6,6E-5			
TPH - Arom >C21-C35	3,6E-6			
Phenanthrene	3,4E-8			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

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TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Residential	Construction Worker	None	None		Residential	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1,2E-5				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Copper	FALSE	-	-	-	-	-				
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =										

Site Name: ACR Montesa
Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208

RBCA SITE ASSESSMENT

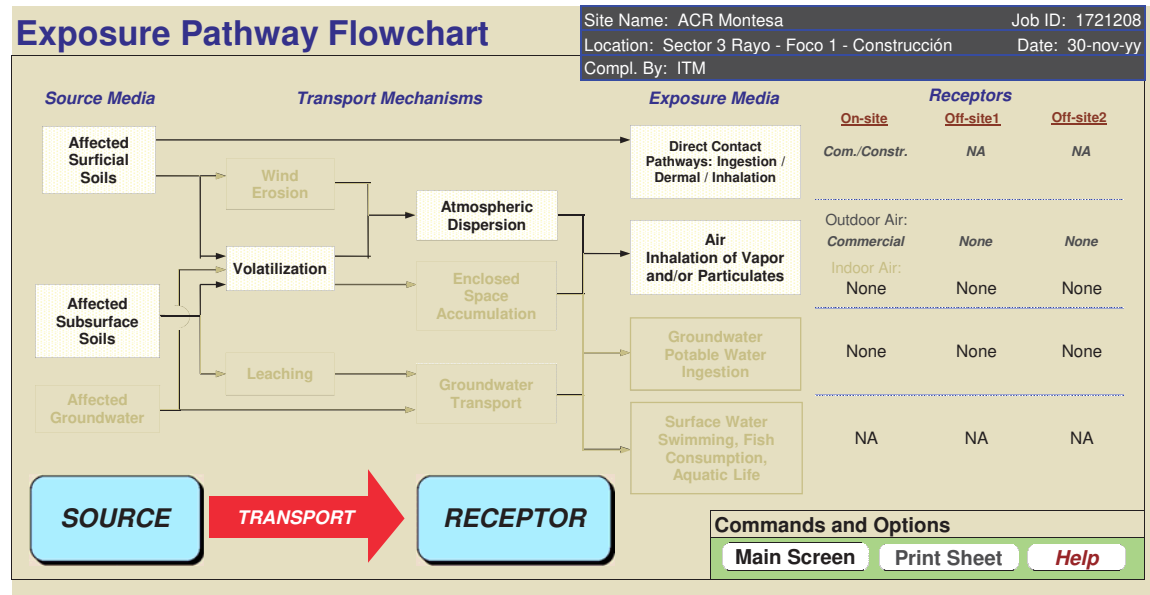
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TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)				
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	
	Residential	Construction Worker	None	None		Residential	Construction Worker	None	None	
Lead (inorganic) *	0,0E+0				-					
Bis (2-ethyl-hexyl) phthalate	3,0E-9				-					
Copper					-					
TPH - Aliph >C21-C34	6,6E-5				-					
TPH - Arom >C21-C35	3,6E-6				-					
Phenanthrene	3,4E-8				-					
Total Pathway Hazard Index =										

Site Name: ACR Montesa
Site Location: Sector 3 Rayo - Foco 1 - Zonas verdes

Completed By: ITM
Date Completed: 30-nov-yy

Job ID: 1721208



TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

1 OF 3

SOIL EXPOSURE PATHWAY (Checked if Pathway is Complete)

SURFACE SOILS: ON SITE INGESTION, DERMAL EXPOSURE

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc. (mg/kg)	Commercial	Construction Worker	Commercial	Construction Worker
Lead (inorganic) *	6.3E+1	1.2E-6	1.3E-7	7.6E-5	7.9E-6
Bis (2-ethyl-hexyl) phthalate	4.1E-1	3.1E-6	1.6E-8	1.3E-6	6.4E-9
Copper	5.9E+2	7.6E-7	1.5E-7	4.5E-4	8.8E-5
TPH - Aliph >C21-C34	4.4E+1	3.6E-6	4.9E-7	1.6E-4	2.2E-5
TPH - Arom >C21-C35	1.0E+2	2.7E-6	3.9E-7	2.9E-4	4.1E-5
Phenanthrene	2.0E-1	2.7E-6	3.9E-7	5.5E-7	7.8E-8

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
 M = Adherence factor (mg/cm²) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm²/day)

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(1) Is Carcinogenic	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day) ⁻¹		(4) Individual COC Risk	
		(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b) (2c)x(3a) + (2d)x(3b)	
		Commercial	Construction Worker	Commercial	Construction Worker				
Lead (inorganic) *	TRUE	1,1E-5	2,3E-5	1,1E-7	1,1E-7	8,5E-3	-	2,9E-7	1,8E-9
Bis (2-ethyl-hexyl) phthalate	TRUE	7,2E-8	1,2E-6	6,9E-10	5,7E-9	1,4E-2	1,4E-2	1,8E-8	9,0E-11
Copper	FALSE			Missing Sfo	Tox?	-	-		-
TPH - Aliph >C21-C34	FALSE			Missing Sfo	Tox?	-	-		-
TPH - Arom >C21-C35	FALSE			Missing Sfo	Tox?	-	-		-
Phenanthrene	FALSE			Missing Sfo	Tox?	-	-		-
* No dermal slope factor available—oral slope factor used.								Total Pathway Carcinogenic Risk =	
								3,1E-7	1,9E-9

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

TIER 2 PATHWAY RISK CALCULATION									
SOIL EXPOSURE PATHWAY <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Total Toxicant Intake Rate (mg/kg/day)				(6) Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient		
	(a) via Ingestion		(d) via Dermal Contact		(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b) (5c)/(6a) + (5d)/(6b)		
	Commercial	Construction Worker	Commercial	Construction Worker			Commercial	Construction Worker	
Lead (inorganic) *	Tox?	Tox?	Missing Rfdo	Missing RfDd	-	-			
Bis (2-ethyl-hexyl) phthalate	2,0E-7	3,3E-6	4,8E-8	4,0E-7	2,0E-2	2,0E-2	1,8E-4	2,2E-5	
Copper	2,9E-4	1,6E-4	6,9E-5	1,9E-5	4,0E-2	4,0E-2	1,1E-2	2,2E-3	
TPH - Aliph >C21-C34	2,2E-5	1,4E-4	5,2E-6	1,6E-5	1,6E+0	1,6E+0	9,9E-5	1,4E-5	
TPH - Arom >C21-C35	5,1E-5	2,4E-4	1,2E-5	2,8E-5	3,0E-2	3,0E-2	9,6E-3	1,4E-3	
Phenanthrene	9,8E-8	4,5E-7	2,3E-8	5,4E-8	3,0E-2	3,0E-2	1,8E-5	2,6E-6	
* No dermal reference dose available—oral reference dose used.								Total Pathway Hazard Index =	
								2,1E-2	3,6E-3

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción
 Completed By: ITM

Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

1 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
SURFACE SOILS (0 - 1 m):									
VAPOR INHALATION	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None
Constituents of Concern									
Lead (inorganic) *	6,3E+1	Error							
Bis (2-ethyl-hexyl) phthalate	4,1E-1	1,1E+7			3,7E-8				
Copper	5,9E+2	Error							
TPH - Aliph >C21-C34	4,4E+1	5,1E+4			8,8E-4				
TPH - Arom >C21-C35	1,0E+2	2,4E+6			4,4E-5				
Phenanthrene	2,0E-1	4,8E+5			4,2E-7				

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

2 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS												
SURFACE SOILS (0 - 1 m):												
VAPOR INHALATION (cont'd)	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m ³ /kg) Receptor				4) Exposure Multiplier (EF*ED)/(AT*365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)		
		Commercial	Construction Worker	None	None	Commercial	Construction Worker	None	None	Commercial	Construction Worker	Off-site 1 (0 m)
Constituents of Concern												
Lead (inorganic) *	6,3E+1	Error										
Bis (2-ethyl-hexyl) phthalate	4,1E-1	1,1E+7			3,7E-8				2,5E-8			
Copper	5,9E+2	Error										
TPH - Aliph >C21-C34	4,4E+1	5,1E+4			8,8E-4				6,0E-4			
TPH - Arom >C21-C35	1,0E+2	2,4E+6			4,4E-5				3,0E-5			
Phenanthrene	2,0E-1	4,8E+5			4,2E-7				2,8E-7			

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

3 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS ■ (Checked if Pathway is Complete)							
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION	1) Source Medium	2) NAF Value (m ³ /kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	None	None	Commercial	None	None
Constituents of Concern							
Lead (inorganic) *	6,3E+1	VFsamb					
Bis (2-ethyl-hexyl) phthalate	4,1E-1	2,9E+9			1,4E-10		
Copper	5,9E+2	VFsamb					
TPH - Aliph >C21-C34	4,4E+1	5,9E+4			7,6E-4		
TPH - Arom >C21-C35	1,0E+2	1,3E+8			8,1E-7		
Phenanthrene	2,0E-1	5,3E+6			3,8E-8		

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

4 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS						
SUBSURFACE SOILS (1 - 1.3 m): VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	None	None	Commercial	None	None
Constituents of Concern						
Lead (inorganic) *	2,4E-1					
Bis (2-ethyl-hexyl) phthalate	6,8E-1			9,8E-11		
Copper	6,8E-1					
TPH - Aliph >C21-C34	6,8E-1			5,2E-4		
TPH - Arom >C21-C35	6,8E-1			5,6E-7		
Phenanthrene	6,8E-1			2,6E-8		

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

5 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION							
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)							
GROUNDWATER: VAPOR INHALATION	Exposure Concentration			3) Exposure Medium			
	1) Source Medium	2) NAF Value (m ³ /L) Receptor			Outdoor Air: POE Conc. (mg/m ³) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
Constituents of Concern	None	None	None	None	None	None	None
Lead (inorganic) *							
Bis (2-ethyl-hexyl) phthalate							
Copper							
TPH - Aliph >C21-C34							
TPH - Arom >C21-C35							
Phenanthrene							

NOTE: NAF = Natural attenuation factor POE = Point of exposure
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

6 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION						
OUTDOOR AIR EXPOSURE PATHWAYS <input type="checkbox"/> (Checked if Pathway is Complete)						
GROUNDWATER: VAPOR INHALATION (cont'd)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m ³) (3) X (4)		
	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)	On-site (0 m)	Off-site 1 (0 m)	Off-site 2 (0 m)
	None	None	None	None	None	None
Constituents of Concern						
Lead (inorganic) *						
Bis (2-ethyl-hexyl) phthalate						
Copper						
TPH - Aliph >C21-C34						
TPH - Arom >C21-C35						
Phenanthrene						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)
 Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

7 OF 9

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION				
OUTDOOR AIR EXPOSURE PATHWAYS				
MAXIMUM PATHWAY EXPOSURE (mg/m ³) <i>Maximum average exposure concentration from soil and groundwater routes.</i>				
Constituents of Concern	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None
Lead (inorganic) *				
Bis (2-ethyl-hexyl) phthalate	2,5E-8			
Copper				
TPH - Aliph >C21-C34	6,0E-4			
TPH - Arom >C21-C35	3,0E-5			
Phenanthrene	2,8E-7			

Site Name: ACR Montesa Date Completed: 30-nov-yy
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Job ID: 1721208
 Completed By: ITM

RBCA SITE ASSESSMENT

8 OF 9

TIER 2 PATHWAY RISK CALCULATION										
OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)										
Constituents of Concern	(1) Is Carcinogenic	(2) Maximum Carcinogenic Exposure (mg/m ³)				(3) Inhalation Unit Risk Factor (µg/m ³) ⁻¹	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
		Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	TRUE			-	-	1,2E-5				
Bis (2-ethyl-hexyl) phthalate	FALSE	-	-	-	-	-				
Copper	FALSE	-	-	-	-	-				
TPH - Aliph >C21-C34	FALSE	-	-	-	-	-				
TPH - Arom >C21-C35	FALSE	-	-	-	-	-				
Phenanthrene	FALSE	-	-	-	-	-				
Total Pathway Carcinogenic Risk =										

Site Name: ACR Montesa Completed By: ITM
 Site Location: Sector 3 Rayo - Foco 1 - Construcción Date Completed: 30-nov-yy
 Job ID: 1721208

RBCA SITE ASSESSMENT

9 OF 9

TIER 2 PATHWAY RISK CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS <input checked="" type="checkbox"/> (Checked if Pathway is Complete)									
Constituents of Concern	(5) Maximum Toxicant Exposure (mg/m ³)				(6) Inhalation Reference Conc. (mg/m ³)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)		On-site (0 m)		Off-site 1 (0 m)	Off-site 2 (0 m)
	Commercial	Construction Worker	None	None		Commercial	Construction Worker	None	None
Lead (inorganic) *	0,0E+0				-				
Bis (2-ethyl-hexyl) phthalate	2,5E-8				-				
Copper					-				
TPH - Aliph >C21-C34	6,0E-4				-				
TPH - Arom >C21-C35	3,0E-5				-				
Phenanthrene	2,8E-7				-				
Total Pathway Hazard Index = <input type="text"/>									

Site Name: ACR Montesa
 Site Location: Sector 3 Rayo - Foco 1 - Construcción

Completed By: ITM
 Date Completed: 30-nov-yy

Job ID: 1721208

GESTIÓN DE TIERRAS EN VERTEDEROS

Gestión de tierras en vertederos

Investigación preliminar de la calidad del subsuelo en el ámbito del ARE Montesa en Esplugues de Llobregat (Barcelona)

Uno de los objetivos de los trabajos de investigación de la calidad del subsuelo ejecutados en el ámbito del ARE Montesa durante el año 2018, ha sido disponer de información que permita determinar de forma preliminar el destino potencial de las tierras en caso de excavación y gestión externa en vertederos.

Para ello se han analizado 14 muestras integradas, 13 de ellas corresponden a la capa de suelo entre 0 y 2 metros, y solamente 1 corresponde a la capa de suelo de entre 2 y 4 metros. Sobre cada muestra se han analizado los parámetros definidos en el *Decreto 69/2009, de 28 de abril, por el que se establecen los criterios y los procedimientos para la admisión de residuos en depósitos controlados*.

Cada muestra integrada agrupa las submuestras tomadas en el conjunto de sondeos localizados en áreas que han soportado los mismos usos, tanto actuales como históricos.

La mayoría de las muestras integradas analizadas son superficiales (0 a 2 m), ya que ninguna de las muestras profundas tomadas en las mismas áreas ha presentado valores por encima de los NGRs para uso urbano. Solamente, en el caso del parking municipal (Sector 2) se ha caracterizado una muestra integrada profunda (2 a 4 metros) con el fin de delimitar en profundidad las concentraciones de algunos parámetros críticos detectados en superficie.

A continuación se presenta las tablas de diagnóstico de las caracterizaciones de muestras de suelos según Decreto 69/2009.

Tabla 1 SECTOR 1.

Zona	Muestras	Observaciones	Posible vertedero de destino
Montesa	1208/S-01-S-05/R-S 1208/S-07-S-12/R-S 1208/S-13-S-18/R-S 1208/S-19-S-24/R-S	Las concentraciones obtenidas no superan en ningún caso los valores límite de admisión en depósitos de residuos inertes.	Inertes
Montesita (Zona tanque gasoil)	1208/C-17-C-18/R-S	La capa de suelo de 0 a 2 m presenta una concentración de aceites minerales (C10 - C40) , por encima del valor límite de admisión para vertedero de inertes (630 mg/Kg vs. 500 mg/Kg)	No peligrosos

Zona	Muestras	Observaciones	Posible vertedero de destino
Montesita (nave antigua fundición)	1208/S-37-S-39/R-S	La capa de suelo de 0 a 2 m presenta una concentración de aceites minerales (C10 - C40) , por encima del valor límite para vertedero de inertes (7.300 mg/Kg vs. 500 mg/Kg)	No peligrosos
Montesita (integrada del resto del área Montesita)	1208/C-06-C-09;S32-S-36/R-S	La muestra no comprende las 2 zonas más impactadas de la zona Montesita. Las concentraciones obtenidas no superan en ningún caso los valores límite de admisión en depósitos de residuos inertes.	Inertes
Depósito municipal de coches	1208/C-01-C-05/R-S	Las concentraciones obtenidas no superan en ningún caso los valores límite de admisión en depósitos de residuos inertes.	Inertes

Tabla 2 SECTOR 2.

Zona	Muestras	Observaciones	Posible vertedero de destino
Copisa	1208/S-25-S-31/R-S	Presenta una concentración de Sulfatos por encima del valor límite para vertedero de residuos inertes (2.100 mg/Kg vs. 1.000 mg/Kg), mientras que la concentración de sólidos totales disueltos STD (3.260 mg/Kg) está por debajo del valor límite para vertedero de inertes (4.000 mg/Kg). Teniendo en cuenta que la determinación de STD se puede utilizar en sustitución de la determinación de los sulfatos y cloruros, el suelo puede clasificarse inicialmente como un residuo inerte.	Inertes
Solar anejo a Copisa	1208/C-13-C-16/R-S	Presenta una concentración de Sulfatos (2.350 mg/Kg) y sólidos totales disueltos STD (4.040 mg/Kg) por encima de los valores límite para vertedero de residuos inertes (1.000 mg Kg y 4.000 mg/Kg respectivamente).	No peligrosos

Zona	Muestras	Observaciones	Posible vertedero de destino
Parquing municipal	1376/S-40-S-44/R-S	Presenta una concentración en lixiviado de Molibdeno (1,1 mg/Kg), sólidos totales disueltos STD (11.000 mg/kg), Sulfatos (6.070 mg/kg) y Fluoruros (62 mg/Kg) por encima del valor límite para vertedero de residuos inertes	No peligrosos
	1376/S-40-S-44/R-P	Presenta una concentración en lixiviado de Fluoruros (44 mg/Kg) por encima del valor límite para vertedero de residuos inertes (10 mg/kg)	No peligrosos

Tabla 3 SECTOR 3.

Zona	Muestras	Observaciones	Posible vertedero de destino
Parquing calle Pompeu Fabra	1208/C-19-C-29/R-S	Las concentraciones obtenidas no superan en ningún caso los valores límite de admisión en depósitos de residuos inertes.	Inertes
Parquing El Rayo	1208/C-30-C-48/R-S	Las concentraciones obtenidas no superan en ningún caso los valores límite de admisión en depósitos de residuos inertes.	Inertes

Se han identificado, de forma preliminar, 4 áreas cuyos suelos en caso de excavación deberían ser gestionados en un vertedero de clase 2 (depósito controlado de residuos no peligrosos). Los suelos del resto de la superficie investigada se podrían, a priori, gestionar en un vertedero de residuos inertes (Clase 1).

Para el cálculo orientativo de los costes de gestión de las tierras se han tomado como referencia los precios facilitados por Everest:

Precio gestión residuos	
Clase I	14 €/Tm
	3 € (canon)
	17 €/Tm
Clase II	52 €/Tm
	15,8 € (canon)
	67,8 €/Tm

Suelos a gestionar en un vertedero de residuos no peligrosos

Montesita: zona tanque gasoil y nave de la antigua fundición

La siguiente figura muestra la superficie aproximada donde se localiza la nave de la antigua fundición y la zona del tanque enterrado de gasoil. En base a las analíticas realizadas se prevé que gran parte de esta área esté afectada por la presencia de TPH y los suelos que se excaven hasta una profundidad aproximada de 2 metros deberían ser gestionados en un vertedero de Clase 2. En algunas zonas, básicamente la zona del tanque y tuberías enterradas, no se descarta que se deba sanear el suelo hasta mayor profundidad.

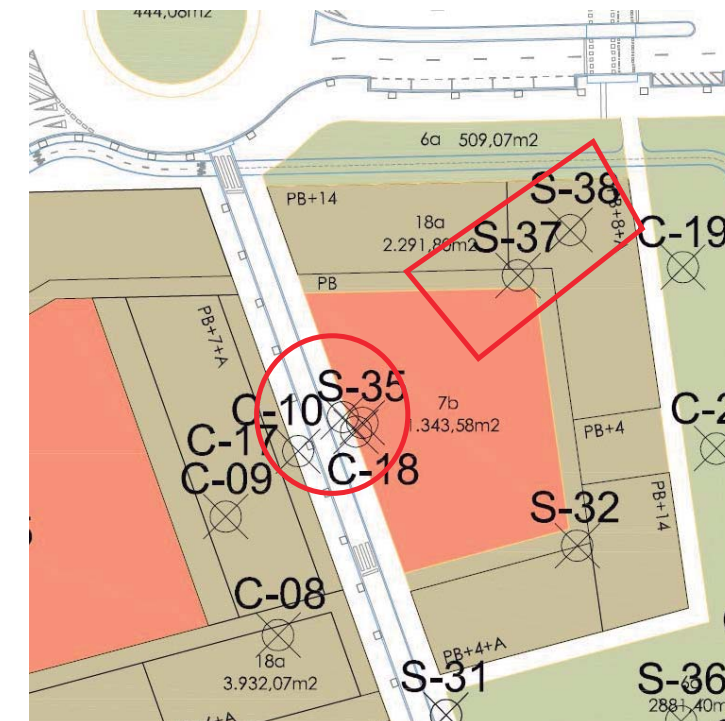


Figura 1. Zona tanque gasoil y nave de la antigua fundición

Cálculo orientativo de costes de gestión de tierras:

Montesita							
	area	profundidad	volumen		densidad	peso	precio gestión
	m	m	m3		Tm/m3		
Sótanos	1100	2	2200 m3		1,7	3740 Tm	253.572,0 €

Solar anejo a Copisa

La figura 2 muestra la superficie del solar anejo a Copisa, en el que de forma preliminar se ha definido que los suelos que se excaven deben ir a un vertedero de Clase 2 hasta una profundidad de 2 metros debido a su contenido en sulfatos y sólidos totales disueltos.

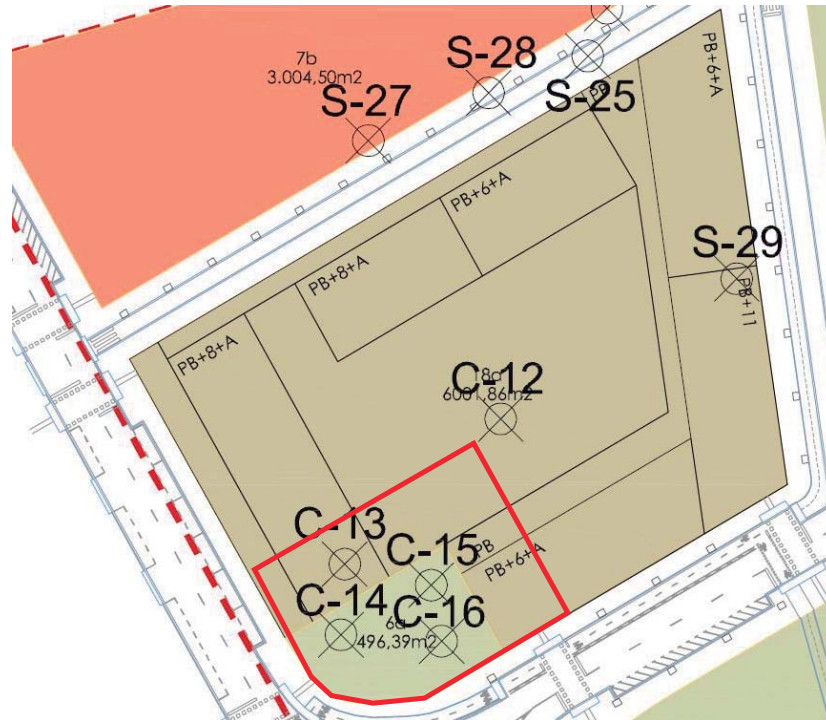


Figura 2. Solar anejo a Copisa

Cálculo orientativo de costes de gestión de tierras:

Solar anejo a Copisa							
	area	profundidad	volumen		densidad	peso	precio gestión
	m	m	m3		Tm/m3		
Sótanos	400	3	1200 m3		1,7	2040 Tm	138.312,0 €
Superficie	600	0,3	180 m3		1,7	306 Tm	20.746,8 €
Total						2346 Tm	159.058,8 €

Parquing municipal

La figura 3 presenta la superficie del parquing municipal, cuyos suelos en caso de ser excavados deberían ser gestionados en un vertedero de Clase 2 debido a la presencia de Sulfatos, Sólidos totales disueltos y Fluoruros hasta una profundidad de 2 metros, y a la presencia de Fluoruros en la capa de 2 a 4 metros.

Se recomienda, no obstante, hacer una caracterización más detallada de las áreas a excavar para acotar la problemática asociada a los sulfatos, STD y fluoruros.

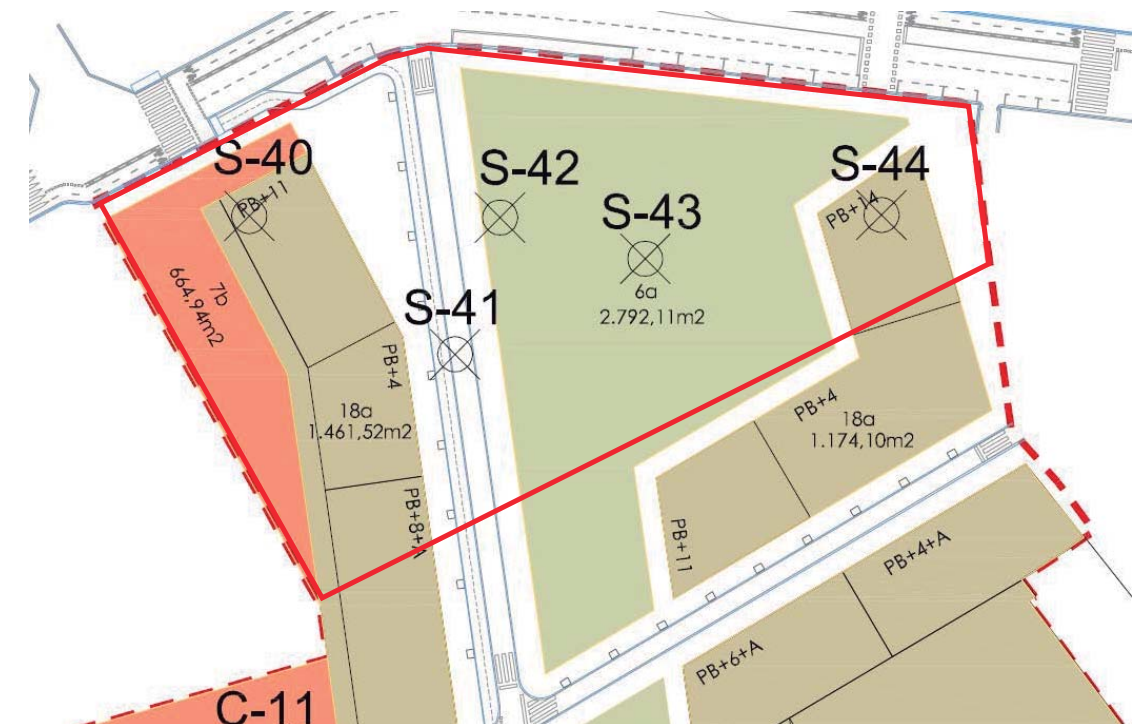


Figura 3. Área del parquing municipal

Cálculo orientativo de costes de gestión de tierras:

Parquing municipal							
	area	profundidad	volumen		densidad	peso	precio gestión
	m	m	m3		Tm/m3		
Sótanos	900	3	2700 m3		1,7	4590 Tm	311.202,0 €
Superficie	4400	0,3	1320 m3		1,7	2244 Tm	152.143,2 €
Total						6834 Tm	463.345,2 €

COORDENADES DE SONDEJOS

COORDENADAS SONDEOS ARE MONTESA
ETRS89 HUSO 31T

DENOMINACION	X UTM	Y UTM	Z
S-01	423.468,1	4.579.918,9	-
S-02	423.464,5	4.579.870,7	-
S-03	423.448,5	4.579.848,8	-
S-04	423.514,3	4.579.851,0	-
S-05	423.478,7	4.579.916,0	-
S-06	423.487,3	4.579.850,1	-
S-07	423.428,3	4.579.875,0	-
S-08	423.404,0	4.579.860,9	-
S-09	423.416,0	4.579.833,1	-
S-10	423.396,5	4.579.831,3	-
S-11	423.408,6	4.579.817,5	-
S-12	423.450,5	4.579.827,4	-
S-13	423.380,3	4.579.842,7	-
S-14	423.326,5	4.579.820,1	-
S-15	423.313,5	4.579.847,2	-
S-16	423.370,0	4.579.827,3	-
S-17	423.316,3	4.579.853,7	-
S-18	423.367,4	4.579.805,7	-
S-19	423.408,8	4.579.889,5	-
S-20	423.429,8	4.579.914,1	-
S-21	423.437,7	4.579.931,7	-
S-22	423.335,2	4.579.891,6	-
S-23	423.354,4	4.579.903,2	-
S-24	423.361,0	4.579.888,7	-
S-25	423.547,0	4.580.128,4	-
S-26	423.550,0	4.580.135,9	-
S-27	423.512,5	4.580.115,1	-
S-28	423.531,4	4.580.122,6	-
S-29	423.570,4	4.580.093,4	-
S-30	423.559,6	4.579.862,5	-
S-31	423.562,0	4.579.887,0	-
S-32	423.582,8	4.579.913,9	-
S-33	423.521,9	4.579.871,1	-
S-34	423.582,7	4.579.874,1	-
S-35	423.548,7	4.579.933,4	-
S-36	423.599,3	4.579.886,0	-
S-37	423.573,4	4.579.956,8	-
S-38	423.581,7	4.579.964,0	-
C-01	423.478,8	4.579.824,9	-
C-02	423.488,4	4.579.813,3	-
C-03	423.507,6	4.579.827,7	-
C-04	423.511,4	4.579.804,5	-
C-05	423.534,1	4.579.824,0	-
C-06	423.559,6	4.579.862,5	-
C-07	423.562,0	4.579.887,0	-
C-08	423.535,3	4.579.899,7	-
C-09	423.527,0	4.579.918,5	-
C-10	423.545,6	4.579.934,3	-
C-11	423.539,1	4.580.142,1	-
C-12	423.533,3	4.580.071,4	-
C-13	423.508,8	4.580.048,6	-
C-14	423.508,2	4.580.037,5	-
C-15	423.522,4	4.580.045,3	-
C-16	423.524,0	4.580.036,5	-
C-17	423.538,5	4.579.928,9	-
C-18	423.547,7	4.579.932,0	-
C-19	423.599,6	4.579.958,1	-
C-20	423.604,9	4.579.929,3	-
C-21	423.614,2	4.579.896,1	-
C-22	423.649,0	4.579.896,3	-
C-23	423.643,5	4.579.923,6	-
C-24	423.631,9	4.579.951,8	-
C-25	423.623,6	4.579.985,6	-
C-26	423.615,1	4.579.950,1	-
C-27	423.624,6	4.579.921,3	-
C-28	423.629,5	4.579.895,3	-
C-29	423.612,0	4.579.878,1	-
C-30	423.121,4	4.580.059,2	-
C-31	423.145,4	4.580.053,2	-
C-32	423.184,5	4.580.087,1	-
C-33	423.157,7	4.580.114,7	-
C-34	423.153,0	4.580.085,1	-
C-35	423.124,7	4.580.087,3	-
C-36	423.195,9	4.580.058,7	-
C-37	423.165,2	4.580.038,4	-
C-38	423.153,2	4.580.004,4	-
C-39	423.136,9	4.580.151,3	-
C-40	423.130,6	4.580.124,1	-
C-41	423.111,1	4.580.117,3	-
C-42	423.099,4	4.580.086,6	-
C-43	423.098,9	4.579.994,2	-
C-44	423.084,4	4.580.030,7	-
C-45	423.093,7	4.580.059,2	-
C-46	423.110,9	4.580.025,2	-
C-47	423.127,7	4.579.999,9	-
C-48	423.136,7	4.579.968,7	-
Pz-01	423.445,5	4.579.887,1	65,68



