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Chronic Human Health Definition: The RSEI model addresses both chronic effects and chronic exposures related to human health. Chronic effects are those that generally persist over a long period of time whether or not they occur immediately after exposure or are delayed. Chronic exposure refers to multiple exposures occurring over an extended period of time, or a significant fraction of an individual's lifetime.
Core chemicals Definition: Those chemicals and chemical categories that have been on the Toxics Release Inventory (TRI) <http://www.epa.gov/tri> List since 1987 and for which there have been no changes in reporting requirements.
Emergency Planning and Community Right-to-Know Act Definition: The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986, which is the third part of the Superfund Amendments and Reauthorization Act of 1986, also known as SARA Title III. Acronym: EPCRA
Environmental fate Definition: The environmental fate of a chemical describes the processes by which it moves through and is transformed in the environment.
Exposed population Definition: The exposed population is the population that is likely to come in contact with a chemical. The population differs depending on the exposure pathway modeled. For instance, the population exposed to chemicals released to air is the population in a 810 m by

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810 m grid surrounding the facility.
Exposure modeling Definition: RSEI's risk-related results include a calculated surrogate dose, which is estimated through exposure modeling. Exposure modeling is a way to track a chemical's fate and transport through the environment, until it comes to a point of contact with an exposed person. Exposure modeling includes using standard assumptions about human exposure to contaminants, such as the drinking water, fish ingestion, or air inhalation rate.
Exposure pathway Definition: The exposure pathway is the physical course (e.g. through the air, or through drinking water) that a chemical takes from its emission by the facility to the exposed individual and is related to the type of release.
Flag Definition: A True/False field in the RSEI databases used to designate chemicals or facilities included in various EPA programs or with certain other characteristics.
Form R Definition: EPA's Toxics Release Inventory (TRI) <http://www.epa.gov/tri> collects information on chemical releases and transfers from reporting facilities every year. The form these facilities fill out is called Form R. Facilities may also fill out a certification statement, called Form A, which certifies that the facility's use of a specific toxic chemical does not meet the minimum threshold requirement, and so is not subject to Form R reporting.
Fugitive emissions

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Definition: On Form R, facilities must report to TRI the medium to which their chemicals are released. Fugitive releases are releases of a chemical to the air that are not released through stacks, vents, ducts, pipes, or any other confined air stream.
Full trend Definition: A set of RSEI results for TRI Reporting Years 1988-2011. In order for the results to be meaningful, the results only include core chemicals and original industries.
Geocoding Definition: Geocoding is the process of assigning latitude and longitude to a point, based on street addresses, city, state and zip code. RSEI uses geocoded data for off-site facilities to better locate the facilities on the model grid. Geocoding services are provided by Thomas Computing Services (TCS), using Matchmaker software.
Grid cell Definition: An approximately 890m by 890m square defined by the (X,Y) coordinates of its center point. The set of grid cells (the grid) describes the United States and its territories and provides the geographical basis of the RSEI model.
Hazard-based Definition: RSEI produces three main types of results: pounds-based, hazard-based, and risk-related. Hazard-based results can be calculated for any set of chemical releases and transfers included in the model, and consist of the pounds released multiplied by the chemical's toxicity weight. Hazard-based results do not include any exposure modeling or population estimates.
Health endpoints

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Definition: An effect of exposure to a toxic chemical, such as carcinogenicity or reproductive toxicity. RSEI considers both cancer and non-cancer chronic human health endpoints in calculating toxicity weights.
Indicator Element Definition: The building block of the RSEI model. A unique combination of facility, chemical release, year, release pathway, and exposure pathway. Each "Indicator Element" has a set of results associated with it. If the element cannot be modeled, then the score is zero; if there is no toxicity weight available, then the hazard-based results are also zero.
Inhalation unit risk Definition: The upper-bound excess lifetime cancer risk estimated to result from continuous exposure to an agent at a concentration of 1 ug/m³ in air.
Maximum Contaminant Level Definition: The maximum permissible level of a contaminant in water delivered to any user of a public system. MCLs <http://www.epa.gov/safewater/contaminants/index.html> are enforceable standards. Acronym: MCL
Media Definition: Path through which a chemical is released into the environment, such as direct water, POTW transfer, fugitive air, etc. See Chapter 10 of the User's Manual <http://www.epa.gov/opptintr/rsei/pubs/rsei_users_manual_v2.3.2.pdf> for a full list of the media included in the RSEI model.

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Mini core Definition: Those chemicals and chemical categories which have been on the TRI List since 1995 and for which there have been no changes in reporting requirements.
Mini trend Definition: A set of RSEI results for TRI reporting years 1995-2011. In order for the results to be meaningful, the results only include mini core chemicals and original industries (http://www.epa.gov/opptintr/rsei/tools/glossary.html#orig_ind).
Modeled hazard Definition: The number of modeled pounds multiplied by the toxicity weight for the appropriate exposure pathway (e.g. inhalation toxicity weight for an air release).
Modeled media Definition: The media for which full risk-related modeling is conducted in the RSEI model. These media include the following: 1-Fugitive Air, 2-Stack Air, 3-Direct Water, 6-POTW Transfer, 750-Offsite Incineration/Thermal Treatment, and 754-Offsite Incineration (No fuel value).
Modeled pounds Definition: Pounds reported by the facility that are modeled and accounted for in the risk score. Reasons that pounds may not be modeled include gaps in toxicity data, data needed for exposure modeling, data for the releasing facility, or other data necessary for modeling.

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Normalization Definition: In the RSEI model, it is possible to express the results normalized to 1988, the first year of data collected by TRI. Reported TRI pounds cannot be normalized.
Off-site Definition: Off-site facilities (or receiving facilities) receive transfers of chemicals from TRI on-site (or reporting) facilities. Types of off-site facilities include waste brokers, publicly-owned treatment works (POTWs), recycling facilities, landfills, and hazardous waste facilities. Transfers to off-site facilities are reported by the on-site facility transferring them.
On-site Definition: On-site facilities (also called reporting facilities) report directly to TRI, and include manufacturing facilities, metal and coal mines, electric utilities, chemical waste facilities, chemical wholesalers, and petroleum bulk stations and terminals. More than 50,000 on-site facilities have reported to TRI since reporting was required in 1988.
Oral slope factor Definition: The Oral Slope Factor represents the upper-bound (approximating a 95 percent confidence limit) estimate of the slope of the dose-response curve in the low-dose region for carcinogens. The units of the slope factor are usually expressed as $(mg/kg\text{-}day)^{1}$.
Original industries Definition: Those industries which were required to report to TRI beginning in reporting year 1988, SIC codes 20 through 39.
Pounds-based

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Definition: RSEI produces three main types of results: pounds-based, hazard-based, and risk-related. Pounds-based results are simply the amount of pounds reported by TRI facilities as released or transferred.
Publicly-owned treatment work Definition: Publicly-owned treatment works (POTWs) are public wastewater treatment facilities that receive wastewater, usually through a pipe system, from facilities using toxic chemicals. Because of the unique treatment system, POTWs are modeled separately from other off-site facilities. Acronym: POTW
Reach Definition: A reach is an unbranched linear segment of a water body with fairly constant hydrological characteristics. A reach can be part of a stream, creek, river, pond, or lake.
Reference Concentration Definition: The Reference Concentration (RfC) is an estimate (with uncertainty spanning perhaps an order of magnitude) of continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious noncancer effects during a lifetime. Acronym: RfC
Reference Dose Definition: The Reference Dose (RfD) is an estimate (with uncertainty spanning perhaps an order of magnitude) of daily exposure

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[RfD] to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious noncancer effects during a lifetime. Acronym: RfD
Reporting Year Definition: The Reporting Year (RY) corresponds to the calendar year (January 1 to December 31) for which facilities report release and other waste management activities in their Form Rs <http://www.epa.gov/opptintr/rsei/tools/glossary.html#Form_R>. Acronym: RY
Risk-related Definition: RSEI produces three main types of results: pounds-based, hazard-based, and risk-related. Risk-related results combine surrogate dose with toxicity weight and population estimate, producing a unit-less value proportional to risk-related impact. Risk-related results (or scores) are not independently meaningful and should only be used comparatively in relation to other model results.
Score Definition: A score is the numerical value in RSEI's risk-related results, combining surrogate dose, toxicity, and population estimates. Scores are not independently meaningful and should only be used comparatively in relation to other model results.
Standard Industrial Classification codes Definition: Standard Industrial Classification codes classify a business or facility according to its primary kind of activity, such as chemical manufacturing or electricity generation. Two-digit codes are the most general, four-digit codes are the most specific (although some unofficial sources use codes up to eight digits); RSEI uses two-digit and four-digit codes.

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Acronym: SIC codes
Stream path Definition: The course taken by a chemical release from its release point (an effluent pipe from a facility or POTW) to the point where it is no longer modeled (up to 300km).
Surrogate dose Definition: A surrogate dose is specific to a combination of facility, chemical release, media, release pathway and exposure pathway. It is calculated in several steps. First, exposure and release pathway-specific chemical release volumes are combined with physicochemical properties and site-specific characteristics in models to estimate an ambient concentration in the environmental medium of concern. The ambient media concentration is then combined with standard human exposure assumptions (for adults and children) to estimate the magnitude of the dose.
Toxicity weight Definition: This weight is a proportional numerical weight applied to a chemical based on its toxicity. The toxicity of a chemical is assessed using EPA-established standard methodologies. For each exposure route, chemicals are weighted based on their single, most sensitive adverse chronic human health effect (cancer or the most sensitive noncancer effect). In the absence of data, the toxicity weight for one pathway is adopted for the other pathway. The range of toxicity weights is approximately 0.02 to 1,400,000,000.
Toxics Release Inventory Definition: The Toxics Release Inventory (TRI) <http://www.epa.gov/tri> is a publicly-available EPA database that contains

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information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups and federal facilities. The RSEI model uses annually updated TRI data. Acronym: TRI
Trend Definition: Any set of RSEI results across two or more years.
Weight of evidence Definition: Weight of evidence (WOE) category. Based on the quality and adequacy of data on carcinogenicity, EPA places a chemical in one of the following five weight of evidence categories, as specified in 51 FR 33996: A. Carcinogenic to humans; B. Probable carcinogen; B1. Indicates limited human evidence; B2. Indicates sufficient evidence in animals and inadequate or no evidence in humans; C. Possible carcinogen; D. Not classifiable; E. Evidence of non-carcinogenicity. Acronym: WOE