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GUIDANCE MANUAL

for complying with the

HAZARDOUS WASTE SOURCE REDUCTION & MANAGEMENT REVIEW ACT OF 1989

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

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State of California

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Document Availability

One complimentary paper copy may be requested by contacting the Office of Pollution Prevention and Green Technology (OPPGT) as noted below. There will be a nominal charge for additional paper copies.

SB 14 Publications can also be printed from the OPPGT website at http://www.dtsc.ca.gov/PollutionPrevention. If this website cannot be reached go to http://www.dtsc.ca.gov and click on Pollution Prevention from the list of sources: Contacting OPPGT.

Acknowledgments

Throughout the implementation of the Hazardous Waste Source Reduction and Management Review Act of 1989, OPPGT received comments and suggestions from a variety of individuals and groups, including private citizens, small and large corporations, environmental associations, trade associations, academia, consulting firms, and local, state and federal agencies. OPPGT sincerely appreciates your interest and participation in the development and implementation of this unique and innovative program.

Disclaimer

The Guidance Manual does not supersede the Hazardous Waste Source Reduction and Management Review Act of 1989 or its implementing regulations. Generators or those who prepare documents for generator, should read the Act and the regulations before using this guidance manual to prepare any source reduction document.

Contacting OPPGT

If you have questions or comments regarding this manual, the Hazardous Waste Source Reduction and Management Review Act of 1989, the regulations, or the Source Reduction Unit, you may contact OPPGT by:

Mail:

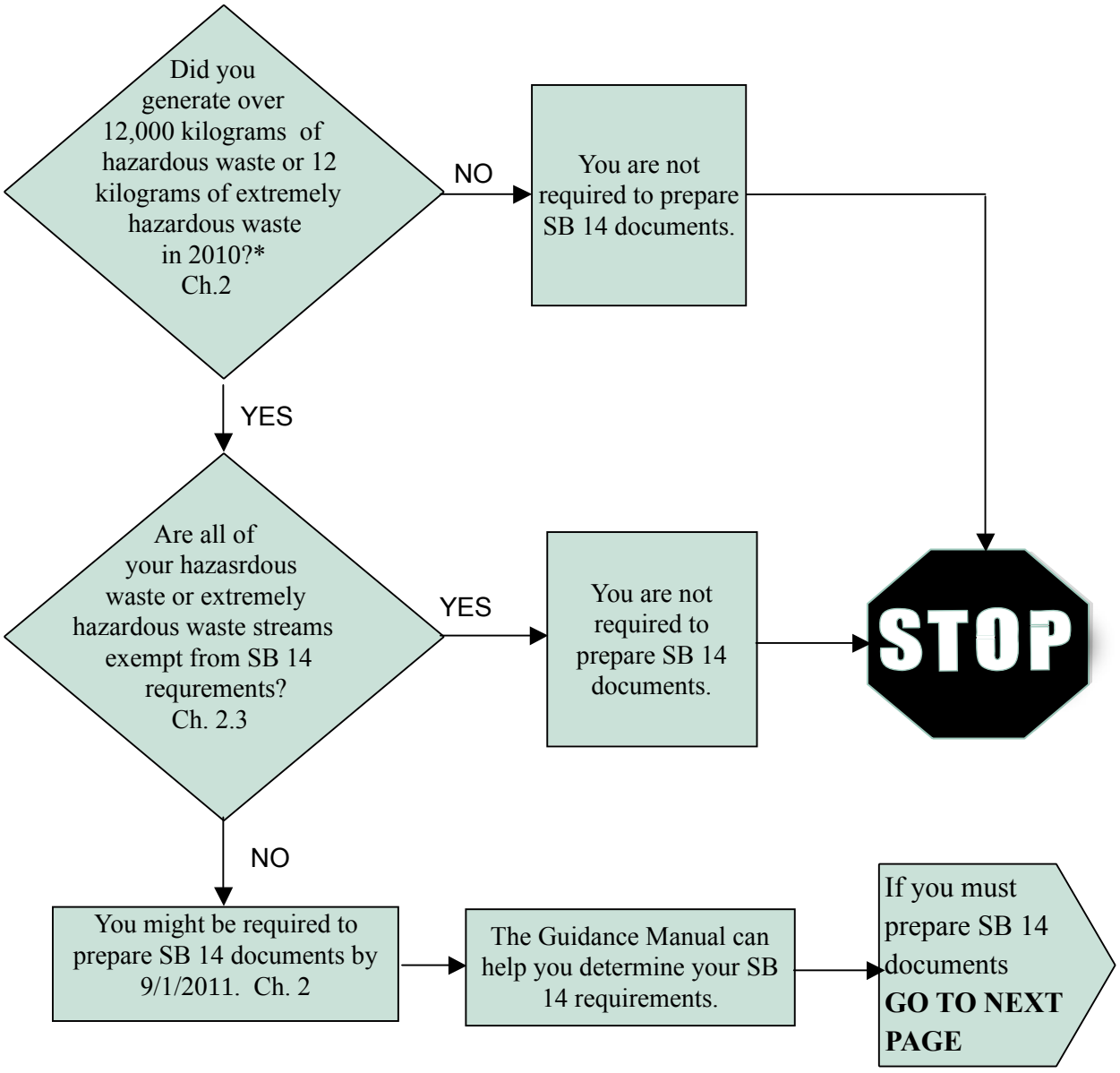
Department of Toxic Substances Control
Office of Pollution Prevention and Green Technology
Source Reduction Unit
P. O. Box 806
Sacramento, CA. 95812-0806

Telephone: 916.322.3670

Fax: 916.327.4494

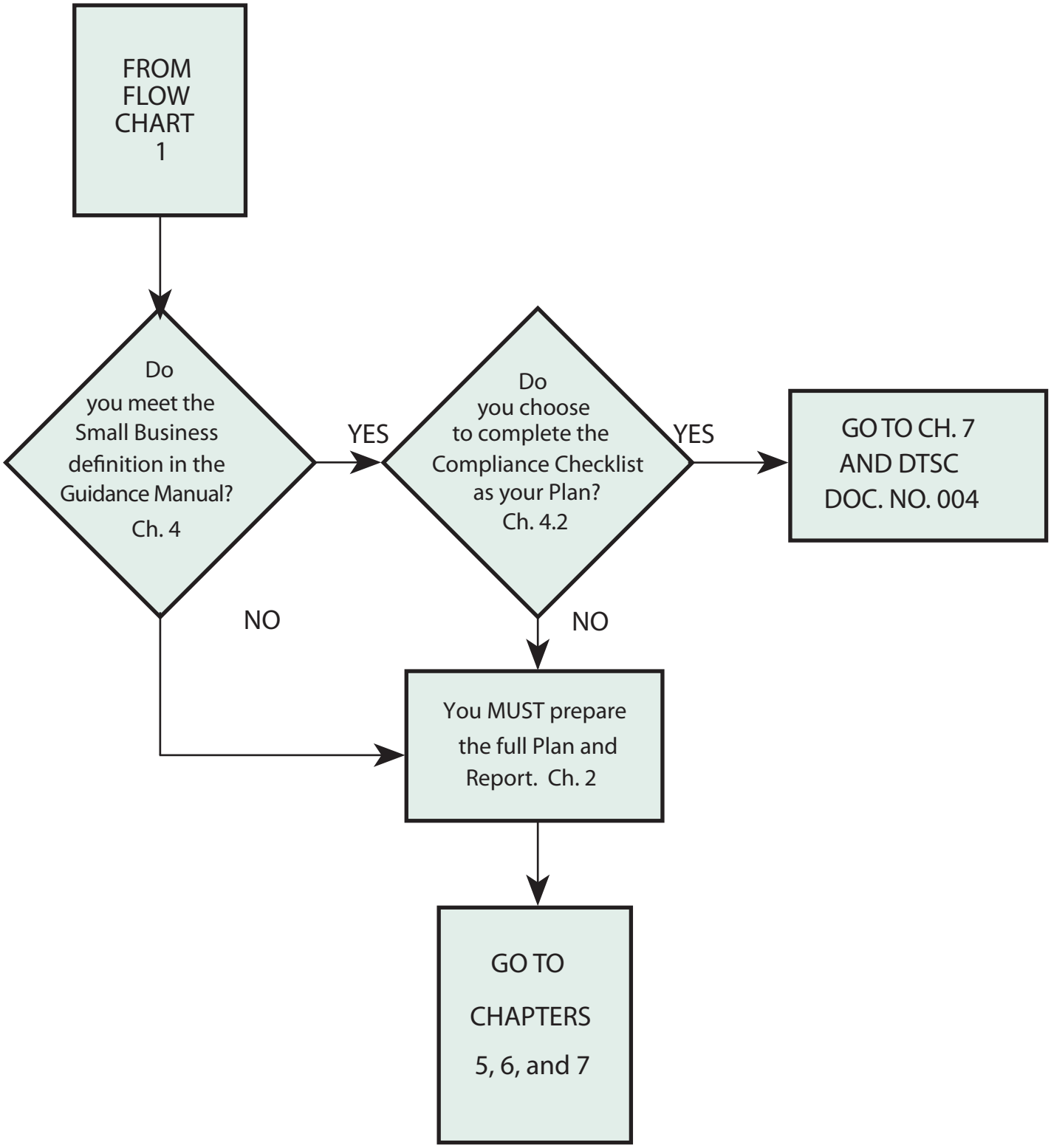
Email: Send your questions about complying with SB 14 to sb14@dtsc.ca.gov. Send requests for OPPGT publications listed in Appendix E to sb14@dtsc.ca.gov.

SB 14 Guidance Flowchart



***Exempt wastes can affect this decision chart.** Consult Chapters 2.3 and 5.3 of the Guidance Manual to adjust for these wastes. **This chart is for guidance purposes only.** Consult the Guidance Manual to confirm SB 14 applicability to your waste stream.

SB Guidance Flowchart



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Preface

SB 14 enables businesses to document their source reduction planning activities. The foundation behind SB 14 is the belief that generators will voluntarily carry out feasible source reduction procedures that save the company money. SB 14 does not require businesses to carry out actual procedures that are not technically and economically feasible. Experience has shown that an effective source reduction planning program must involve everyone in the company from top management leadership to the daily operations of the plant personnel.

Sometimes companies hire a consultant to conduct their source reduction audit and prepare the required SB 14 documentation. This approach should include the opportunity for the participation of plant personnel, those who ultimately will be working with the selected source reduction procedures. A better approach involves the plant personnel in developing the best source reduction method for their area of the plant and ultimately benefiting from the actual procedures. The role of a consultant would be to help this employee-based evaluation.

Effective source reduction audits involve the same tools and strategies used to continuously improve business products and services. Quality-based source reduction planning provides an opportunity to eliminate a production defect, remove a manufacturing inefficiency, or improve a product. Intimately involving more company employees in planning ingrains more of the resulting source reduction ethics into the corporate culture. This will ensure not only the selection of appropriate procedures, but their continued improvement and most important, an ongoing company-wide source reduction approach to business operations.

Chapter 1 Introduction

1.1 About SB 14

The goals of the Hazardous Waste Source Reduction and Management Review Act of 1989 (commonly referred to as SB 14) are to:

1. Reduce the generation of hazardous waste at its source,
2. Reduce the release to the environment of chemicals that have adverse and serious health or environmental effects, and
3. Document hazardous waste management information and make that available.

SB 14 also encourages recycling where source reduction is not feasible or practicable. Where source reduction or recycling is not feasible, the waste should be treated in an environmentally safe manner to minimize the present and future threat to human health and the environment.

The Department of Toxic Substances Control (DTSC) adopted regulations to carry forward the intent and mandate of SB 14. The regulations provide generators the flexibility to use their knowledge of their own operations and procedures to reduce hazardous waste generation and prevent the release of pollutants to the environment. The regulations specify the format for documenting a careful review and evaluation of potential source reduction measures, rather than the waste management actions that must be taken.

SB 14 and the Hazardous Waste Source Reduction and Management Review Act of 1989

Senate Bill (SB) 14 was passed in 1989 to add Source reduction planning and reporting requirements for generators subject to the Hazardous Waste Control Law. SB 14 source reduction requirements passed into law as Article 11.9, under Chapter 6.5, Division 20 of the Health and Safety Code. SB 14 named Article 11.9 the "Hazardous Waste Source Reduction and Management Review Act of 1989."

Although SB 14 was the bill itself, state regulatory officials and hazardous waste generators commonly refer to the resulting Act and corresponding regulations as "SB 14."

The State and Federal Hazardous Waste Management Hierarchy

The preferred order for managing hazardous waste is:

1. Source reduction
2. Recycling
3. Treatment
4. Discharge or disposal

1.2 Required SB 14 Documents

A generator who is subject to SB 14 must prepare documents that describe the source reduction program the generator has developed and is implementing. For the reporting year 2010, the following documents must be prepared by September 1, 2011:

1. Source Reduction Evaluation Review and Plan (Plan)
2. Hazardous Waste Management Performance Report (Performance Report)
3. The Summary Progress Report (SPR)

Additionally, the Summary Progress Report (SPR) must be completed by the generator and submitted to the DTSC Office of Pollution Prevention and Green Technology (OPPGT) on or before September 1, 2011. The generator must retain copies of the Plan, Performance Report, and SPR on-site, and have the documents readily available for on-site review by DTSC, a local agency, or the public.

The Plan is a forward looking document and must include an estimate of the quantity of hazardous wastes generated, an evaluation of potential source reduction approaches, a timetable for implementing selected source reduction measures, and a four-year numerical goal. The Plan must also address the predicted effectiveness of selected measures at reducing hazardous waste and releases to all environmental media (the air, land and water). A generator who is a small business may choose to complete OPPGT's industry-specific checklists, Waste Audit Studies or Compliance Checklist in place of the Plan. OPPGT developed the Compliance Checklist as an alternative format of the Plan for smaller businesses that have inadequate technical and financial resources for obtaining information and assessing source reduction methods.

The Performance Report is a retrospective document and must include an assessment of the effect on waste generation of each waste management approach implemented since the baseline year, including source reduction, recycling and treatment. The Report can serve as a way for the generator to share with the public all of the positive efforts to improve the management of hazardous waste at the generator's site.

The Summary Progress Report summarizes the result of implementing the source reduction measures identified in the generator's previous Plan and the amount of reduction that the generator anticipates will be achieved by the implementation of source reduction selected in the current Plan.

1.3 About the Guidance Manual

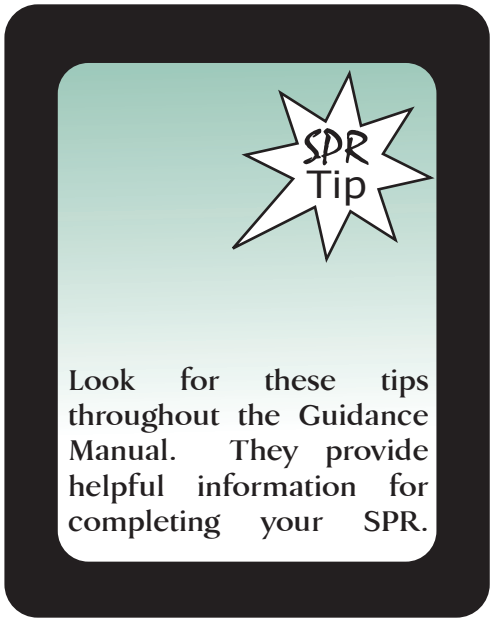
The Office of Pollution Prevention and Green Technology (OPPGT) developed the Guidance Manual to serve as a reference for hazardous waste generators preparing the source reduction documents required by SB 14. The topics presented in the Guidance Manual follow the general order of the SB 14 regulations. The Guidance Manual will help the reader determine if they must comply with SB 14 and, if so, guide them in preparing a Plan, Performance Report, and SPR. Each major chapter references the corresponding SB 14 regulation.

In addition to addressing the regulatory requirements specified by SB 14, the Guidance Manual contains additional information to help those who are preparing source reduction documents. Suggestions, example formats, and stories of successful source reduction measures are placed within shaded boxes to indicate that the information is not a requirement of SB 14. OPPGT hopes that these suggestions and examples make the process of preparing source reduction documents easier, reduce the number of errors, and increase the success of implementing source reduction.

Appendices to this manual contain the following information which may be useful during the preparation of source reduction documents:

A. SB 14 law
B. SB 14 regulations
C. List of Standard Industrial Classification (SIC) codes
D. List of California Waste Codes
E. List of publications available from OPPGT
F. List of local Unified Program Agencies includingCertified Unified Program(CUPAs), designated agencies, and participating agencies
G. Completeness Lists to help track the preparation and completeness of source reduction documents.

This Guidance Manual includes SPR Tips (example shown on right) to help a generator complete the SPR. The tips help by indicating where requirements are found in the Plan and Performance Report.



1.4 To Obtain SB 14 Documents

Publications for SB 14 and other OPPGT topics are available by contacting OPPGT at (916)322-3670. See Appendix E for a complete list of publications available from OPPGT. SB 14 Publications can also be printed from the OPPGT website at: http://www.dtsc.ca.gov/PollutionPrevention. If this website cannot be reached, go to http://www.dtsc.ca.gov and click on Pollution Prevention from the list of sources.

1.5 Completeness Reminders

If you are required to prepare SB 14 documents, and you have completed the documents for the reporting year 2010, did you remember to:

- Review the Appendix G Completeness Lists to verify document compliance?
- Include a Technical Certification as detailed in Chapters 5 and 6?
- Include a Financial Certification as detailed in Chapters 5 and 6?

These are common but serious omissions. Your Plan and Performance Report are incomplete without the technical and financial certifications.

1.6 Submittal Reminders

If you are required to prepare SB 14 documents, did you remember to:

- Prepare a Summary Progress Report as detailed in Chapter 7?
- Submit your Summary Progress Report to DTSC by September 1, 2011?

You are not in compliance with SB 14 unless you prepare a Summary Progress Report, and submit it to DTSC.

A Source Reduction Success - Children's Hospital Los Angeles

Children's Hospital Los Angeles (CHLA) has been operating since April 1, 1901 and is a 318-bed licensed acute care pediatric hospital. The facility supports one of the largest educational programs of any pediatric institution in the country. The CHLA operates schools of Physical Therapy, Medical Technology, and X Ray Technology. Because of the research facilities on campus, CHLA has larger and more diversified hazardous waste streams than other area hospitals.

Children's Hospital Los Angeles continues to implement innovative source reduction measures for all of their waste streams. In general, chemical purchases have steadily declined in the past five years while research and patient loads have increased. The following are a few examples of source reduction measures implemented at their hospital.

- Analysis and evaluation was done to assess how oils, lab chemicals, and solvents entered the industrial wastewater clarifier. Analysis showed chemical residues from the labware cleaning process entering the wastewater system. All excess waste in the labware was put through the cleaning systems with disregard to chemicals ending up in the clarifier. The clarifier had to be pumped and cleaned monthly with hot water and bleach to reduce hydrocarbon buildup. In fiscal year 1994-95, a program was initiated to train personnel in the maintenance of the cleaning system, use of the proper receptacles for the collec tion and disposal of chemical wastes, and use of the autoclave for cleaning and steriliza tion of labware.

  In midyear 1995, hydrocarbon-reducing enzymes were introduced into the clarifier system to reduce hydrocarbons and alleviate the need to pump and clean the clarifier monthly. No capital outlay was needed, pumping costs were reduced by $1950 per month, and contaminated wastewater entering the POTW was reduced by 46,541 pounds per year.

- All laboratory euthanasia now uses carbon dioxide instead of ethyl ether. This input substitution has improved worker safety and reduced the reporting of extremely hazard ous substances. In addition, there is a substantial cost difference between chemicals.

- Mercury thermometers, blood pressure cuffs, and related instruments/devices were replaced with non-mercury thermometers, and electronic/chemical piezometric devices. Replacement of mercury units with new electronic devices took place over a long period to ensure product manufacturers could provide equipment that was suitable for use in the pediatric setting. Electronic devices for blood pressure and thermometer reading are comparable in cost to instruments containing mercury because they do not have hig h disposal costs. In addition, the electronic devices do not pose a hazard to patients and workers.

Chapter 2 Applicability

2.1 Applicability Thresholds

SB 14 applies to a generator that, by site, routinely generates, through ongoing processes and operations, more than 12,000 kilograms of hazardous waste in a reporting year, or more than 12 kilograms of extremely hazardous waste in a reporting year. It includes hazardous waste regulated by Title 40 Code of Federal Regulations (40 CFR), as legislated in the federal Resource Conservation and Recovery Act (RCRA). It also includes non-RCRA California-only hazardous waste. The non-RCRA waste is not regulated as hazardous by 40 CFR, but is regulated as hazardous by Title 22, California Code of Regulations (22 CCR).

The generator must sum the total hazardous waste generated at his/her site during the reporting year then subtract any wastes that are exempted, not routinely generated, or excluded per recycling law. If the total remaining wastes exceed either SB 14 threshold, the generator must prepare the following documents by September 1, 2011 (see example):

1. Source Reduction Evaluation Re view and Plan (Plan), for reporting year 2010
2. Hazardous Waste Management Performance Report (Performance Report) for reporting year 2010
3. Summary Progress Report (SPR) for reporting year 2010

The generator must also send the completed SPR to OPPGT on or before September 1, 2011. A copy of the Plan, the Performance Report, and the SPR must be maintained at the site and made available for review upon request.

Example

Hazardous Waste	CWC	Amount Generated - 2010
Rinse water	132	85,600 gallons
Plating bath	792	1,000 gallons
Filter cake	171	890 pounds
Paint waste	331	10,000 pounds
Solvent	214	1,500 pounds
Waste oil	221	500 pounds
Drums/containers	513	5,400 pounds
Asbestos waste	151	200 pounds
Contaminated Rags	551	500 pounds

Threshold Equivalents

12,000 kg	=	26,400 lbs
12,000 kg	=	13.2 tons
12,000 kg	=	3,100 gallons
12 kg	=	26.4 lbs

To determine the applicability of SB 14 to a specific site, the generator should understand the terms used in SB 14, identify wastes generated at the site that are excluded from SB 14, collect data on the weight of hazardous wastes and extremely hazardous wastes generated at the site during the reporting year, and be familiar with operations at the site.

2.2 Terms and Definitions

The generator of a waste must determine if the waste is a hazardous waste or an extremely hazardous waste. Sections 25115 and 25117 of the Health and Safety Code define extremely hazardous waste and hazardous waste, respectively. 22 CCR Section 66262.11 provides the steps a generator must follow to determine if the waste is a hazardous waste or extremely hazardous waste.

Baseline year means either of the following, whichever is applicable:

1. For a generator's initial Performance Report, the baseline year is the calendar year, selected by the generator, for which substantial data is available on hazardous waste generation, on-site management, or off-site management. However, the generator may select the current reporting year as the baseline year for the initial Performance Report.
2. For all subsequent Performance Reports, the baseline year is the reporting year of the immediately preceding Performance Report. For example, if the generator was required to prepare SB 14 documents for 2006, the baseline year for the 2010 Performance Report would be 2006.

Reporting year means the calendar year immediately preceding the year in which a source reduction document is to be prepared. For source reduction documents due September 1, 2011, the reporting year is calendar year 2010. The generation of hazardous waste can fluctuate from year to year. However, under SB 14, a generator considers only hazardous waste routinely generated during the reporting year when determining if the applicability threshold is exceeded.

More specifically, routinely generated hazardous waste and/or extremely hazardous waste includes:

1. Wastes that result from ongoing processes or operations,
2. Wastes generated from regularly scheduled maintenance or production activities performed once a year or more frequently than once a year,
3. It might also include wastes generated from regularly scheduled maintenance or production activities performed less frequently than once a year.

Site is defined in section 25205.1(h) of the Health and Safety Code, to mean "the location of an operation which generates hazardous wastes and which is noncontiguous to any other location of these operations owned by the generator." Noncontiguous is the key word. If two operations are touching and owned by the same person, the operations are on one site.

A Simple Method for Determining Applicability

Ask yourself the following questions to help determine if SB 14 applies to your site. Do not include exempted wastes, wastes not routinely generated, or excluded wastes.

1. Are total manifested waste quantities greater than SB 14 thresholds? "Yes" means you may be subject to SB 14.
2. Do you pretreat more than 3,100 gallons of hazardous aqueous wastes on-site under tiered permit authorization prior to discharge? "Yes" means you may be subject to SB 14.

If the answer to both 1 and 2 above is "no," then ask the following question.

3. Is the total waste quantity in 1 and 2 above greater than SB 14 thresholds? "Yes" means you may be subject to SB 14.

NOTE: Refer to Section 2.3 of this chapter to determine how exemptions or exclusions may apply to your facility.

2.3 Exempted Waste Streams

DTSC exempts a waste stream from the requirements of SB 14 (but not from the management requirements of other Articles of 22 CCR) if the waste has no source reduction opportunities or is not routinely generated. A generator does not include an exempted waste stream when calculating the total weight of hazardous waste generated at a site to determine SB 14 applicability. For the reasons stated above and other common limitations, the following waste streams are specifically exempted by 22 CCR Section 67100.2. Process specific exemptions, such as in-line recycling of process waste, need to be determined individually. Exempted waste streams include:

How might routinely generated waste include waste generated less frequently than once a year?

Example: If a plating shop drains and discards its spent plating bath solution as hazardous waste once every two or three years, and does so in 2010 but not in 2009 and not in 2011, then it does need to report the 2010 drained waste in SB 14 documents for the 2010 reporting year. If it drains in 2009 and/or 2011 but not in 2010, then it does not report the drained waste for the 2010 reporting year.

- Motor vehicle fluids and motor vehicle filters
- Lead acid batteries
- Household hazardous wastes, wastes from household collection events, and wastes separated at community landfills
- Waste pesticides and pesticide containers collected by county agricultural commissioners
- Spent munitions and ordinance
- Decommissioned utility poles
- Oil generated from decommissioned refrigeration units
- Mercury relays and low-level radioactive tubes generated from removal of telephone equipment.
- Lighting wastes including ballasts and fluorescent tubes.
- Hazardous wastes that are designated as universal wastes in Section 66261.9.
- Waste from site cleanup and mitigation activities, including remedial investigations
- Samples and evidence from enforcement actions
- Asbestos
- Polychlorinated biphenyls (PCBs)
- Formation fluids and solids from oil, gas, and geothermal exploration and field development
- Recent legislation expands the geothermal drilling waste exemption to include (under certain conditions) wastes generated from the exploration, development, or production of geothermal energy (Senate Bill 1294, Chapter 143, Statutes of 2006).
- Demolition waste/major renovation waste
- Waste generated from emergency response actions
- Waste generated from laboratory scale research
- Medical waste

If you have any questions regarding SB 14 exempted waste streams, please contact OPPGTs Source Reduction Unit at (916) 322-3670. A generator may request OPPGT to exempt a hazardous waste stream with no practicable source reduction.

Collect Data on Hazardous Waste

Data on hazardous waste manifested off-site, as well as hazardous wastewater effluents, may come from a variety of sources, including:

- Hazardous waste manifests
- Biennial hazardous waste generator reports
- Wastewater flow records
- Superfund Amendments and Reauthorization Act (SARA) Title III Section 313 environmental release reports
- Environmental audit reports
- Permits [RCRA Part B; National Pollutant Discharge Elimination System (NPDES); etc.]
- Lab reports/characterization data
- Chemical inventory and usage records
- NPDES monitoring reports
- Internal waste tracking system records
- Production records

These sources of information are helpful in calculating the total hazardous waste generated. They also provide valuable information such as hazardous characteristics and current (off-site as well as on-site) management methods.

Another way for a large business to accumulate information or to supplement its collection is to prepare a brief questionnaire for key departments, such as production, maintenance, and service, which are known or suspected to generate waste. A review of operator logs or production records may also provide useful information in calculating quantities of hazardous waste.

from the requirements of SB 14. OPPGT considers requests on a case by case basis. However, the documentation required to demonstrate that no practicable source reduction exists for a hazardous waste stream may be extensive.

2.4 Additional Considerations

- When determining applicability of SB 14 at a site, a generator must include the weight of aqueous hazardous waste streams before pretreatment and discharge to a sewer.
- In determining the applicability of SB 14 (22 CCR Section 67100.2(a)), hazardous waste streams must be evaluated separately from extremely hazardous waste streams when comparing these waste streams to their respective applicability thresholds. For example, if the generator is above the 12,000 kg threshold for hazardous waste, and above the 12 kg threshold for extremely hazardous waste, then both hazardous waste and extremely hazardous waste must be addressed as part of SB 14 planning and reporting.
- A generator may manage wastes by a variety of strategies, such as transport off site for recycling, treatment or disposal; on-site treatment; or on-site recycling.
- Do not double-count the waste. For onsite treatment of a hazardous waste, count only the hazardous waste influent entering the treatment unit and not any resulting hazardous waste residue or effluent leaving from the unit.

- California Hazardous Waste Law excludes some recyclable materials from classification as a waste, provided the conditions in Section 25143.2 of the Health and Safety Code are satisfied.
- How a hazardous waste stream is managed on-site may affect its inclusion in determining the applicability of SB 14 to the site. For example, some hazardous waste recycling processes do not currently require a permit from DTSC (i.e., they are exempt from tiered permitting requirements). But the material may still be designated a hazardous waste and captured by SB 14. Generators should carefully read section 25143.2 of the Health and Safety Code to determine if a recyclable material is designated a hazardous waste, and therefore, subject to inclusion in the SB 14 applicability determination. If you have any questions about recycling exclusions, call the DTSC Waste Identification and Recycling section at (916) 327-4499.
- The residual material from the treatment of hazardous waste received from an off-site facility is not a waste that has been generated on-site by the generator. Therefore, the generator should not include this residual material when determining SB 14 applicability at the site.

Organize, Sort, and Display Data

Once you have collected all the hazardous waste data for your facility for ReportingYear 2010, estimate your annual hazardous waste production by waste stream. Screen the data to determine which waste streams are exempted or not routinely generated.

When estimating the weights of each waste stream, use the conversion factors in Chapter 2.1 to document each annual total in pounds. Table 1 below is a tool one could use to organize, screen, and quantify their hazardous waste generation. It also provides concise documentation of your data collection effort and your decision process regarding the wastes that were included in (or excluded from) your Plan.

The table includes a "waste type" column, which is designated as hazardous waste, extremely hazardous waste, nonhazardous waste, or waste exempted by regulation. The Table also includes a "frequency" column, which is designated as routinely generated or not routinely generated. Waste type and frequency are the two criteria used to sort the data. A column for the California Waste Code (CWC) is included to group the wastes. A list of CWCs can be found in the Appendix D.

Table 1. Optional Table to Organize Waste Generation Data (Example format --- not required by SB 14)

Site Name: _____ **Reporting Year:** _____

Waste Stream	Waste Type[1]	Frequency[2]	CWC[3]	Weight (lbs)

[1] **Waste Type Codes**
H = hazardous waste
E = extremely hazardous waste
W = nonhazardous waste
X = waste exempt by 22CCR 67100.2(c)

[2] **Frequency codes**
R = routinely generated
N = not routinely generated

[3] **CWC** = California Waste Code

Chapter 3 Compliance Deadlines

3.1 Dates to Remember

SB 14 requires generators to prepare SB 14 documents on or before September 1, 1991 and every four years thereafter, when the generation of hazardous waste or extremely hazardous waste exceeds the corresponding applicability threshold during a reporting year. That requirement means on or before September 1, 2011, the three documents to be prepared are the Plan, Performance Report, and Summary Progress Report (SPR). The documents are to be prepared for the 2010 reporting year.

3.2 Mandatory Summary Progress Report Submittal

The requirement to prepare and submit an SPR to OPPGT applies to all generators subject to SB 14. The SPR must be submitted to OPPGT by September 1, 2011. Details on preparing and submitting an SPR are provided in Chapter 7.

3.3 New Owner

If a generator acquires a site that has an existing set of source reduction documents, the new owner has six months to amend the documents (22 CCR Section 67100.2(d)). If the new owner does not amend the documents within six months, the existing documents, including the selected source reduction measures and numerical goal, will continue to apply to the site. The new owner would also responsible for the implementation of the selected source reduction measures according to the existing implementation schedule.

However, the provisions of 22 CCR Section 67100.4(c) allow a new owner some discretion after the six months deadline expires. For example, the new owner might determine that a selected measure is not technically feasible or economically practicable. The new owner may then decide not to implement a selected source reduction measure if attempts to implement the measure reveal that the measure would result in, or has resulted in, any of the following:

- An increase in the generation of hazardous waste;
- An increase in the release of hazardous chemicals to other environmental media;
- Adverse impacts on product quality; and
- A significant increase in the risk of an adverse impact to human health or the environment.

The new owner's decision to not implement a selected source reduction measure does not require any government approvals. However, the new owner must amend the Plan to reflect the decision to not implement a selected measure. The amendment to the Plan must include proper documentation identifying the rationale for the decision.The amendment can be in

the form of an addendum, dated and signed by the individual qualified to technically certify the plan, and incorporated into the Plan by reference.

A Source Reduction Success - Gold Seal Plating

Gold Seal Plating is a company in California of 18 to 36 employees that provides nickel, copper, silver, andgold plating of jewelry and flexible circuits. Gold Seal Plating performs rack and barrel platingand operates both manual and automatic plating lines.

Gold Seal Plating began targeting its hazardous rinsewaters for source reduction in 1980. In late 1995, Gold Seal Plating reached the goal that many metal plating facilities are trying to achieve- zero water discharge. Gold Seal Plating did not become a zero water discharge facilityquickly. They achieved this status through a systematic approach that included commitment, good research and planning, some common sense, good employee relations, and trial and error.

Gold Seal Plating began its source reduction approach by first considering the low cost, common sense approaches. These approaches included:

- Improved bath maintenance
- Fog rinsing above heated process baths
- Reuse of drag-out solutions in heated baths
- Reuse of spray rinses in rinse tanks
- Electrocleaner purification
- Countercurrent rinsing
- Electrowinning to recover precious metals from rinse tanks

By incorporating these changes, the metals loading into the rinsewater was reduced by 90% and the rinsewater flow rate was reduced from 15 gallons per minute (gpm) to 6 gpm. Gold Seal Plating wanted to further improve its rinsewater quality without requiring the use of more city water, additional wastewater treatment, or increasing its discharge to the sewer. Gold Seal Plating installed an ion exchange system to remove the contaminants from the rinsewater, thereby providing high quality deionized water for reuse in the rinse system. Costs per 1000 gallons of rinsewater treated was reduced from $29 (on-site treatment) to $6-8 (ion exchange). With the use of an evaporation system for the ion exchange regenerant, Gold Seal Plating was able to cap its sewer in January, 1996.

Gold Seal Plating's systematic approach to source reduction had many advantages. The reduction in metals loading and rinsewater flow allowed Gold Seal Plating to select a more costeffective ion exchange system. Gold Seal Plating installed a 15 gpm ion exchange system that allows improvements in rinse water quality and increases in rinsewater use due to production changes. Without taking the first steps, Gold Seal Plating would have purchased a larger, more costly ion exchange system. The higher capital cost of the larger ion exchange system, in addition to the cost of waste treatment and maintenance, would have limited expansion of the system to accommodate increases in production.

For its source reduction accomplishments, Gold Seal Plating received awards from the California Water Environment Association, East Bay Municipal Utility District, Peninsula Conservation Center Foundation, Santa Clara County, and the U.S. Congress. In addition, Gold Seal Plating's recognition as an environmentally-conscious business has increased its customer base beyond California.

Chapter 4 Options

for a Small Business, Multiple Sites, or a Complex Site

4.1 Definition of "Small Business"

The definition of a "small business" used by SB 14 is taken from section 11342.610 of the California Government Code which states:

A. "Small business" means a business activity in agriculture, general construction, special trade construction, retail trade, wholesale trade, services, transportation and warehousing, manufacturing, generation and transmission of electric power, or a health care facility, unless excluded in subdivision B, that is both of the following:
1. Independently owned and operated.
2. Not dominant in its field of operation.

B. "Small business" does not include the following professional and business activities:
1. A financial institution including a bank, a trust, a savings and loan association, a thrift institution, a consumer finance company, a commercial finance company, an industrial finance company, a credit union, a mortgage and investment banker, a securities broker-dealer, or an investment adviser.
2. An insurance company, either stock or mutual.
3. A mineral, oil, or gas broker.
4. A subdivider or developer.
5. A landscape architect, an architect, or a building designer.
6. An entity organized as a nonprofit institution.
7. An entertainment activity or production, including a motion picture, a stage performance, a television or radio station, or a production company.
8. A utility, a water company, or a power transmission company generating and transmitting more than 4.5 million kilowatt hours annually.
9. A petroleum producer, a natural gas producer, a refiner, or a pipeline.
10. A manufacturing enterprise exceeding 250 employees.
11. A health care facility exceeding 150 beds or one million five hundred thousand dollars ($1,500,000) in annual gross receipts.

C. "Small business" does not include the following business activities:
1. Agriculture, where the annual gross receipts exceed one million dollars ($1,000,000).
2. General construction, where the annual gross receipts exceed nine million five hundred thousand dollars ($9,500,000).
3. Special trade construction, where the annual gross receipts exceed five million dollars ($5,000,000).
4. Retail trade, where the annual gross receipts exceed two million dollars ($2,000,000).

5. Wholesale trade, where the annual gross receipts exceed nine million five hundred thousand dollars ($9,500,000).
6. Services, where the annual gross receipts exceed two million dollars ($2,000,000).
7. Transportation and warehousing, where the annual gross receipts exceed one million five hundred thousand dollars ($1,500,000).

4.2 Options For a Small Business

A generator that meets the definition of a small business and meets the SB 14 applicability criteria outlined in Chapter 2, must also comply with SB 14. In place of the Plan, a small business may choose to complete any one of the following documents:

- Hazardous Waste Source Reduction Compliance Checklist (Compliance Checklist)
- Industry-specific Waste Audit Study plus Sections 1, 3, 4, 5 and 6 from the Compliance Checklist
- Industry-specific Hazardous Waste Minimization Checklist and Assessment Manual plus Sections 1, 3, 4, 5 and 6 from the Compliance Checklist

Small businesses may find that completing the forms in the Compliance Checklist or appropriate Waste Audit Study easier than completing a Plan. OPPGT developed the Compliance Checklist for use by companies not addressed by the industry-specific Waste Audit Studies or Hazardous Waste Minimization Checklist and Assessment Manuals. These documents may be used in place of the Plan by small businesses that have inadequate technical and financial resources for obtaining information and assessing source reduction methods. The Compliance Checklist, Waste Audit Studies, and Checklist and Assessment Manuals listed in Appendix E are available from OPPGT. See Chapter 1 for information on obtaining SB 14 documents or for OPPGT contact information.

In addition, as an alternative to preparing a Performance Report required by SB 14, a small business may use its most recent biennial generator report (BGR), as required by 22 CCR Section 66262.41, as the Performance Report required by SB 14.

As with all generators subject to SB 14, small businesses must prepare a Summary Progress Report (SPR) and submit it to OPPGT by September 1, 2011.

4.3 Options For Multiple Sites

A generator that owns or operates multiple sites with similar processes, operations,and waste streams may prepare a single, multiple-site Plan, Performance Report, and SPR addressing all of the sites. A generator that chooses this option may avoid unnecessary duplication of work. However, generator must either keep a copy of the multi-site Plan, Performance Report, and SPR at each site, or at a central location such as a public library or local government agency [22 CCR 67100.3(b)].

Multi-site generators should verify the applicability of SB 14 requirements at each site, before preparing the Plan, Report, and SPR. This is because the multi-site Plan etc. should not include a site for which SB 14 is not applicable.

4.4 Options For a Complex Site

A generator that owns a complex site with multiple operations that are managed as independent businesses may choose to prepare a separate Plan, Performance Report, and SPR for each operation that is independently managed. An example of a complex site is a site where hazardous wastes generated at each operation are managed by a separate environmental coordinator or production unit. A generator that chooses this option may avoid the burden of coordinating source reduction evaluation and planning activities between businesses or operations that would otherwise act independently.

A Source Reduction Success - The Martin Luther King Jr./Charles R. Drew Medical Center

The Martin Luther King Jr./Charles R. Drew Medical Center (KDMC) in Los Angeles is a direct result of the historic Watts Riots of 1965. Following the riots, former Governor Pat Brown appointed John A. McCone to head a commission to study the causes of the riots. The McCone Commission Report identified the absence of accessible quality health care as a major contributor to the civil disturbance.

KDMC is a short-term general acute care community teaching facility, a Level I Trauma Center, and a Level III Newborn Intensive Care Unit. The facility has 14 approved clinical residency training programs, and operates a Paramedic Base Station and emergency heliport. The following are a few of the source reduction methods implemented by the hospital:

- In the past, maintenance workers manually washed paint guns in the paint shop with thinner. Manual washing released thinner into the surrounding work space and generated thinner waste. However, a Herkules Paint Gun Washer and Recycler that uses compressed air was installed in the paint shop in mid-1994. Practically all the usedthinner is now captured as liquid waste. The washer effectively cleans the paint gun and reuses the thinner for additional washes. Thinner waste was reduced by 28%, or 500 pounds per year. The capital cost was $975 and operation and maintenance costs are $100 a year.
- Laboratory technicians manually dipped slides with blood smear into the stains. The manual process takes 12 to 15 minutes. A Wescor Aerospray Hematology Slide Stainer was installed in January 1995. The automatic slide stainer sprays the slides with the stains, minimizing the generation of alcohol waste. The machine can replace the manual staining process for most slides with the exception of bone marrow slides. The machine takes less than 10 minutes. The slide stainer costs $6000 and has annual recurring costs of $600. Annual savings in chemicals and waste disposal are $930 and $50, respectively. The use of the automatic slide stainer is estimated to save a minimum of 1 person-hour per day. Since the Hematology Laboratory operates 365 days per year, the automatic stainer saves approximately 365 person-hours per year or $9125 per year.
- Employees used or serviced mercury sphygmomanometers daily, and a number of mercury spills resulted from breakages. Replacement of mercury sphygmomanometers in the patient care areas with TycosR Aneroid Sphygmomanometers was completed in 1994. The aneroid sphygmomanometers are accurate and do not contain mercury. The estimated hazardous waste source reduction was 75%, or 150 pounds per year.

Chapter 5 The Plan

5.1 Before Preparing the Plan

Generators subject to SB 14 shall prepare a plan with sufficient detail to convey an understanding of the source reduction evaluation and review and analysis performed (22 CCR Section 67100.5).

SB 14 specifies that a Plan must be understandable and contain sufficient information to convey an understanding of the facility's review and evaluation ofpotential source reduction measures. The Plan can consist of narratives, photographs, illustrations, figures and data to meet the requirements of a Plan established by SB 14.The level of detail will vary from site to site. However, the Plan should contain sufficient information to enable an outside reader to understand the overall flow of materials between the processes at the site, identify the processes generating hazardous waste, and understand the facility's review, evaluation and selection of potential source reduction measures.

Planning for Successful Source Reduction

A thorough evaluation of source reduction measures is the result of a combination of many factors, including a **commitment** by management, **awareness** among employees, and **effort**. The establishment and implementation of a successful source reduction program requires a proper plan and a **systematic approach**. There is no one right way to begin. However, successful source reduction programs possess several common elements:

1. Source reduction is part of the **core value structure** of a business, corporation, or institution, regardless of the size of the facility. It is intrinsic in the company's philosophy, practices, and goals. Qualitative source reduction goals are among the measurements of success. The source reduction policy and goals are documented in writing, distributed to all employees, and **considered in day-to-day decisionmaking**.
2. **Management supports** the source reduction philosophy and objectives and **commits the resources** to carry out the source reduction program.
3. A person or team is authorized to manage, direct, incite, and assume responsibility for the operation and maintenance of the source reduction program.

5.2 General Site Information

The Plan must contain the following general site information:

- Name of the site
- Location of the site including street address, city, county, and zip code. In the case of multiple sites, provide the street address, city, county, and zip for each site location.

- Telephone number
- Hazardous Waste Generator Identification Number issued by USEPA or DTSC.
- Four-digit Standard Industrial Classification (SIC) code applicable to activities at the site.

SIC codes are developed by the federal government for characterizing sites by their business activity. A list of SIC codes is in Appendix C. Use the one code that best describes the operations occurring at the site.

General Site Information

A generator collecting background information before beginning the source reduction evaluation should keep in mind which information must be included in the Plan. Narrative text, data, or figures derived from file correspondence, process flowcharts, or other records may be useful when preparing the Plan.

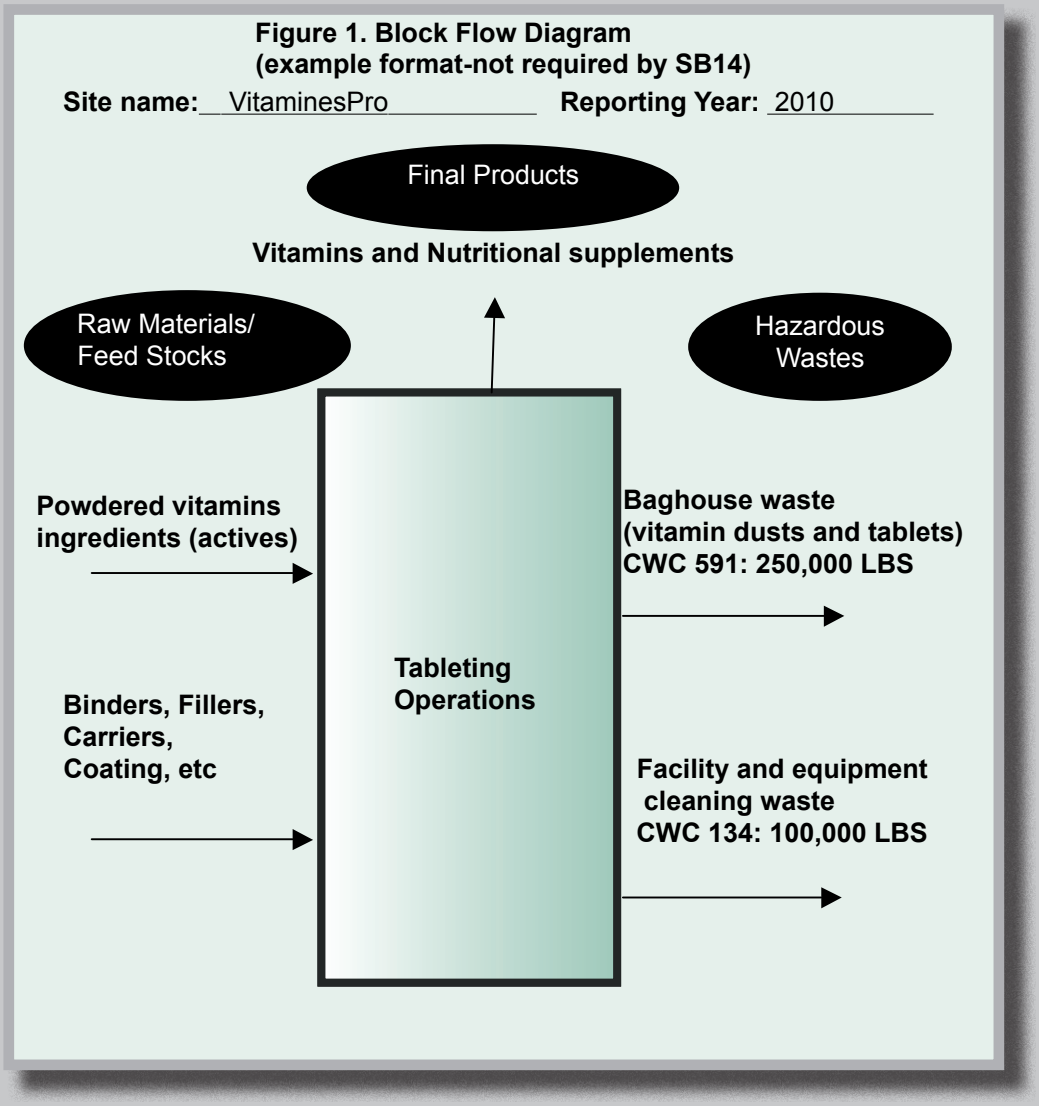
If a generator owns multiple sites with similar operations and chooses to prepare a multisite Plan, only one SIC code should be used to represent all sites.However, any site that contains different operations, different processes or different waste streams can not be covered by the multisite Plan. A separate Plan must be completed for each site not covered by the multisite Plan.

If a generator owns a complex site with multiple operations managed as independent businesses and chooses to prepare a separate Plan for each operation, an SIC code must be provided for each operation.

- Similarly, where requested in the SPR, the generatorshould include its North American Industry Classification System(NAICS) code number. Go to

  http://www.naics.com to determine your facility's NAICS Code.
- Brief description of the type of business or activity conducted at the site.
- Length of time the company has been in business at the present site. The length of time helps relate to the age of the equipment or production operation. The potential for source reduction may correlate to the age and technology of the production process.
- Major products manufactured or services provided. If the generator is concerned that the products or services may not be understood by someone reading the Plan, the generator may provide a description of the end use or application of the products.
- Number of employees
- A general description of the site operations, with corresponding block diagrams for each process evaluated. Each block diagram should highlight quantity and type of raw materials, hazardous waste, and final products produced. Examples of block diagrams are shown in Figure 1.

Section 4 of the SPR requests generators to provide their North American Industry Classification System (NAICS) Code. Go to: http://www.naics.com to determine your facility's NAICSCode.



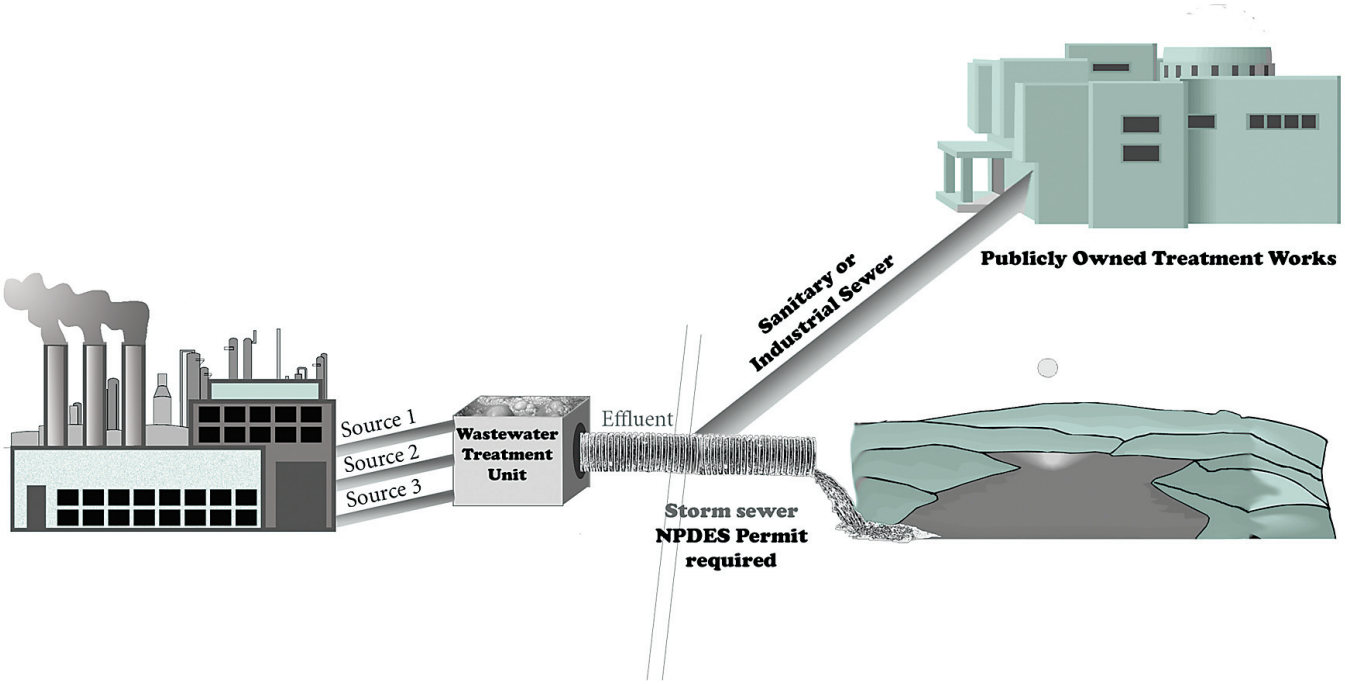
Diagrams can help communicate information without requiring pages of narrative description. Note that the diagrams are meant to show general process and waste stream information. The diagrams are not meant to represent a mass balance of materials processed, products produced, and waste generated at the site.

5.3 Identify Major Waste Streams

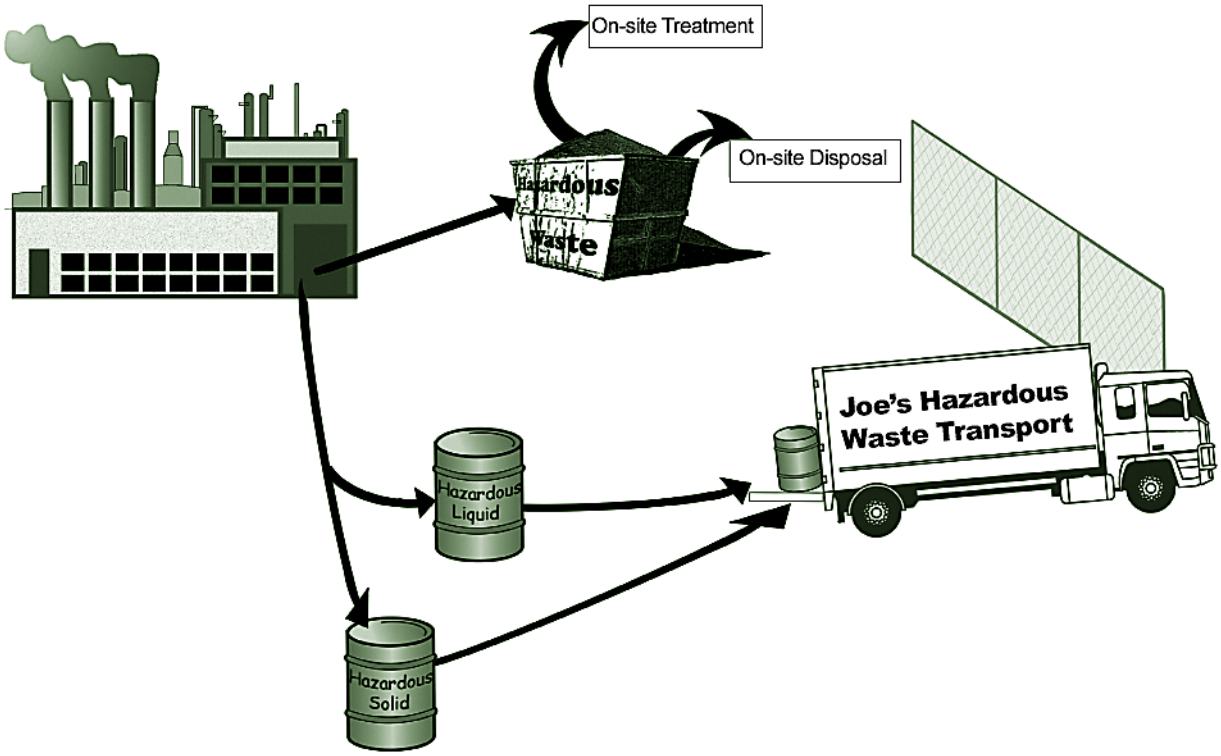
Your Plan does not need to address source reduction for every individual waste stream. 22 CCR Section 67100.5(h) specifies that you are only required to address the major waste streams. Major waste streams are wastes that account for more than 5% of your facility's total hazardous waste generation.

Determining what is a major waste stream requires more than a simple 5% calculation because major waste streams can fall into one of three categories. For the purposes of this Guidance Manual only, hazardous waste streams are labeled as Categories A, B and C to help instruct generators through the process of calculating their major waste streams. Category A, Category B, and Category C are neither statutory nor regulatory terms.

- **Category A: hazardous wastes that are processed through an on-site waste water treatment unit prior to discharge to a publicly owned treatment works (POTW) or to a receiving water under a National Pollutant Discharge Elimination System (NPDES) permit.**



- **Category B: all other hazardous wastes, including waste shipped off site for treatment, recycling or disposal, manifested waste, and waste that is treated or disposed on site.**



[Note: In the 1998 and earlier editions of this guidance manual, the term aqueous waste was used to describe hazardous wastes that fall under Category A; and nonaqueous waste was used to describe wastes that fall under Category B.]

- **Category C: Wastes that are classified as extremely hazardous wastes. Use the following four-step procedure to calculate major hazardous waste streams from your operations.**

5.4 Subtotaling Similar Waste Streams into one Major Waste Stream

For similar process waste streams sharing the same California Waste Code, the wastes might be subtotaled into a single major waste stream when making the 5% calculation. This subsection clarifies CCR **67100.5(h) regarding when and how to subtotal waste streams from similar processes for making a major waste stream calculation.**

Some individual waste streams might be identified with the same California Waste Code number (CWC) in industrial processes or institutional operations. The SB **14** provision of **22** CCR Section **67100.5** (h) stated below applies only to individual waste streams sharing the same CWC and originating from similar ongoing processes or operations:

22 CCR **Section 67100.5 (h) states:**

"Similar industrial processes or institutional activities generating similar wastes (with the same California Waste Codes) shall be considered a single waste stream for purposes of this subsection."

Accordingly, when a generator is identifying its major waste streams, only those individual waste streams having the same CWC and being from similar processes or operations can be grouped and subtotaled as a single major waste stream having that CWC. However, individual waste streams sharing the same CWC but not originating from similar processes or operations cannot be grouped and subtotaled as a single major waste stream having that CWC.

For example, a facility generates CWC **214** spent organic solvents from both its equipment cleaning and from its extraction processes. The facility should not group the spent solvents together as one waste stream under CWC **214**. Instead, all the CWC **214** spent solvents from similar cleaning operations should be grouped together; and all the CWC **214** spent solvents from similar extraction procedures should be grouped together.

Step 1 – Quantify All Hazardous Wastes

Identify the total amount of all hazardous waste generated by your operations in the reporting year. Do this by reviewing hazardous waste manifest records, operational records from on-site hazardous waste treatment, recycling records, and disposal records. (You may have already done this to determine if you must comply with SB 14 (see Chapter 2.) Use this information to develop a list similar to that shown in Example 5-1. When developing this list, be sure to:

1. Include hazardous wastes that fall under Category A. The quantity that you list should be the quantity prior to on-site treatment. If your treatment unit processes hazardous waste from more than one source, list each hazardous waste source separately, as shown in Example 5-1.

2. Include all hazardous wastes, liquid and solid, that fall under Category B. These must include wastes that are shipped off site for treatment, recycling or disposal, as well as hazardous wastes that are treated, recycled, and/or disposed on site.

3. Exclude those hazardous wastes that are not generated routinely and those that are excluded or exempt from SB 14 (See Chapter 2).

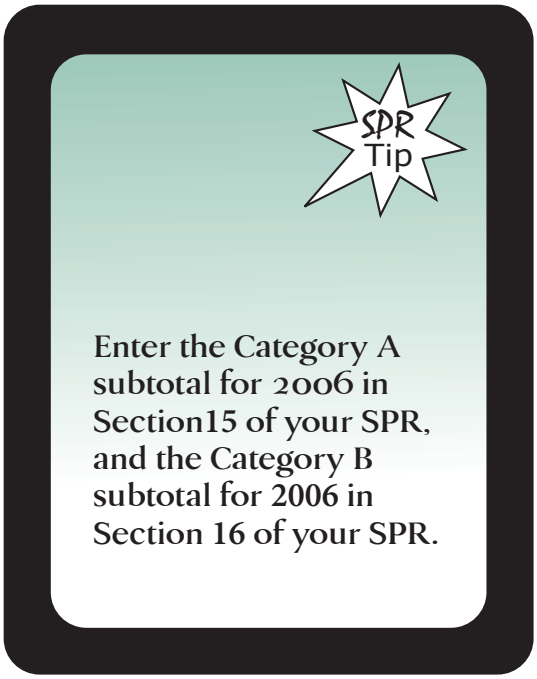
4. Exclude hazardous waste residuals (i.e., filtercake, sludge) that are generated from the on-site treatment of Category A wastes.

5. Exclude nonhazardous waste streams that are processed on site in a wastewater treatment unit, but be sure to include resultant residuals if they are hazardous.

6. Convert all waste streams to the same weight units (i.e., pounds or kilograms).

7. List Category A wastes and Category B wastes separately, and sum each category of waste stream as shown in Example 5-1.

If your operations produce extremely hazardous wastes (Category C), calculate major waste streams for extremely hazardous wastes on a separate table.



Example 5-1: Add Up All SB 14 Applicable Hazardous Waste Streams

Hazardous Waste Streams*	CWC	Quantity (units)	Weight (pounds)	Processed in Wastewater Treatment Unit?
Spent rinse water	132	85,000 gal.	713,900	*yes*
Spent plating bath	792	1,000 gal.	8,340	*yes*
Category A Subtotal			722,240	
Paint waste	331		10,000	*no*
Spent solvent	214		1,500	*no*
Emptied drums and containers	513		5,400	*no*
Contaminated cleanup rags	181		500	*no*
Category B Subtotal			17,400	
Total			**739,640**	

* Include routine wastes only. Do not include non-routine, exempted, and excluded wastes.

Step 2 – Calculate Major Waste Streams for Category A Wastes

SB 14 requires that hazardous waste streams that are processed in a wastewater treatment unit that discharges to a POTW or to a receiving water under an NPDES permit (Category A) be differentiated from those that are not (Category B) when calculating major waste streams. Use the following procedure to make this differentiation:

- Divide the quantity of each Category A waste stream by the total quantity of both Category A and B waste streams, and then multiply the result by 100 to get a percentage. (See Example 5-2)
- If applicable, calculate this percentage for each source (or hazardous waste stream) that contributes to the influent to a single wastewater treatment unit.

Major Category A waste streams are those that exceed 5% of the totalhazardous waste generated at the site, and must be evaluated for source reduction in the Plan. Smaller waste streams that are less than 5% are referred to as minor waste streams.A generator may choose to include minor waste streams in their Plan, although it is not required under SB14.

Planning Beyond SB 14

Although SB 14 requires a generator to conduct a detailed source reduction evaluation of only major hazardous waste streams, SB 14 does not prohibit a generator from conducting an evaluation for minor or nonhazardous waste streams and including their analyses in the Plan. However, if a generator chooses to expand the scope of the Plan beyond the major hazardous waste streams, those wastes should be clearly identified so reviewers can focus on SB 14 wastes for compliance purposes.

Step 3 – Calculate Major Waste Streams for Category B Wastes

To calculate major waste streams for Category B wastes, simply divide the quantity of each Category B waste stream by the subtotal of all Category B waste streams, and then multiply the result by 100 to get a percentage (See Example 5-2). Major waste streams are those that exceed 5% of the total hazardous waste listed under Category B. These waste streams must be evaluated for source reduction in the Plan.

Step 4 – Calculate Major Waste Streams for Extremely Hazardous Wastes

Step 4 applies only to facilities that, in a reporting year, routinely generated more than12 kilograms (26.4 pounds) of extremely hazardous waste as defined in 22 CCR Sections 66261.107 through 66261.113.

Major waste streams for extremely hazardous wastes must be calculated separately from waste streams that fall under Categories A and B. Start by listing and quantifying all extremely hazardous waste generated at your site during the reporting year. Prepare tables similar to those presented in Example 5-1 and 5-2. Divide each extremely hazardous waste stream by the total amount of extremely hazardous waste. If an individual waste stream is over 5%, it is a major waste stream and must be evaluated for source reduction in your Plan.

Example 5-2: Use Steps 2 and 3 to calculate Major Waste Streams

Hazardous Waste Stream*	CWC	Quantity (units)	Weight (pounds)	Processed in Wastewater Treatment Onsite Unit?	Percent by Weight	Major Waste Stream? (>5%)
Spent rinse water	132	85,000 gal.	713,900	*yes*	96% [1]	*yes*
Spent plating bath	792	1,000 gal.	8,340	*yes*	1% [1]	*no*
Category A Subtotal			722,240			
Paint waste	331		10,000	*no*	57% [2]	*yes*
Spent solvent	214		1,500	*no*	9% [2]	*yes*
Emptied drums and containers	513		5,400	*no*	31% [2]	*yes*
Contaminated cleanup rags	181		500	*no*	3% [2]	*no*
Category B Subtotal			17,400			
Total			**739,640**			

(1) Percentage calculated as described in Step 2, using total wastes from Categories A plus B of 739,640 pounds.
(2) Percentage calculated as described in Step 3, using subtotal wastes from Category B of 17,400 pounds.

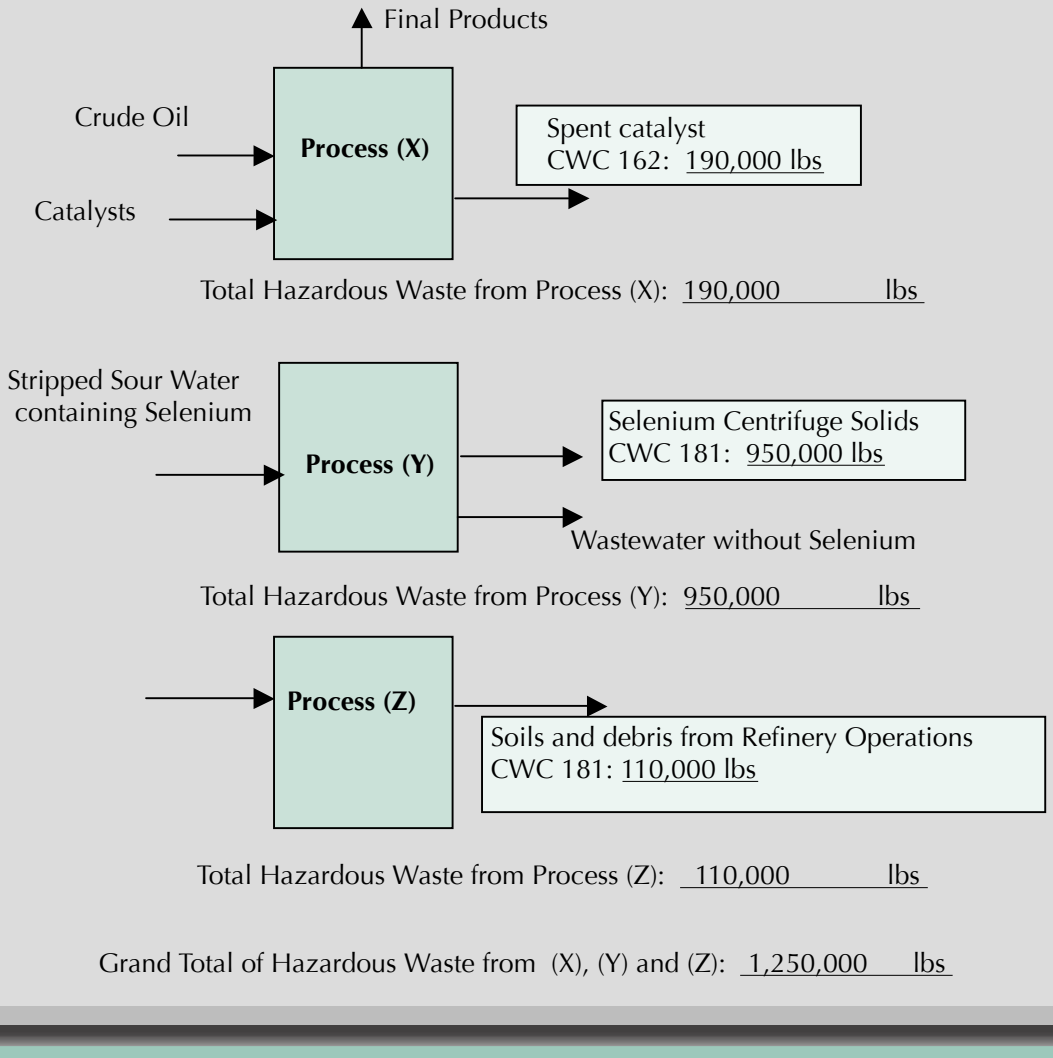
5.5 Information on Major Waste Streams

The Plan must contain the following information for all major hazardous and extremely hazardous waste streams for the current reporting year **2010**:

- An estimate of the weight (pounds) of the hazardous waste generated.
- The applicable California Waste Code (CWC) for each major waste stream.The list of CWCs is provided in Appendicx D. The CWC and weight of eachmajor waste stream in Examples **5-1** and **5-2** are recorded in the respectivetables.
- The processes, operations and activities generating the wastes, with corresponding block flow diagrams. An example format is suggested in Figure **2**.
- Constituents and their concentrations which cause the waste stream to be hazardous, when needed to evaluate and implement source reduction measures.

Figure 2. Block Flow Diagram by Major Waste Streams

(Example Format-not required by SB 14)



5.6 Identify and Evaluate Source Reduction Measures

The primary objectives of this phase of the Plan are threefold:

1. To develop and screen source reduction measures, considering at a minimum the five approaches mandated by SB 14. The five approaches are:

   a. Input changes, such as raw material or feedstock changes to reduce, avoid or eliminate the hazardous materials that enter the production process (thereby avoiding the generation of hazardous wastes within the production process).

b. Operational improvements, such as loss prevention, waste segregation, production scheduling, maintenance operations, and overall site management.

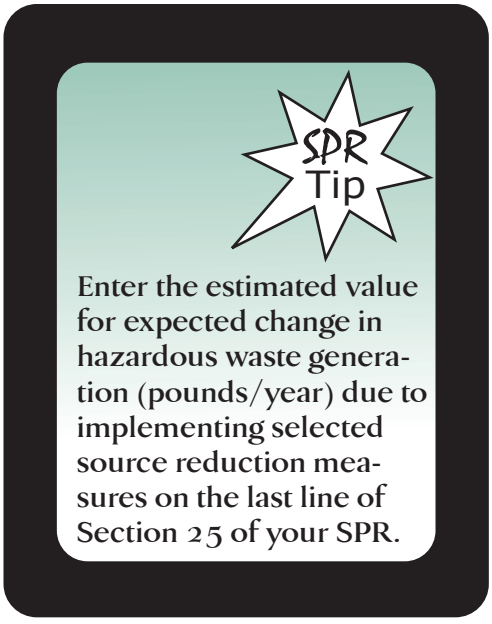
c. Production process changes, such as process changes, changes in production methods or techniques, equipment modifications, changes in process operating conditions (i.e., temperature, pressure), process or plant automation, or the return of materials or their components for reuse within existing processes.

d. Product reformulations, such as changes in design, composition or specification of final or intermediate products.

e. Administrative steps, such as inventory control and employee programs. Administrative steps include good operating practices that apply to the human aspect of conducting day-to-day operations at the facility. These include employee training, incentives, bonuses and other such programs that encourage employees to strive for reducing hazardous waste. The focus should be on preventing the generation of hazardous waste.

2. To conduct a detailed analysis of potentially viable source reduction measures.
3. To set up an implementation schedule for the selected measures.

The generator's evaluation of potentially viable source reduction measures must consider the following seven factors:



1. Expected change in the amount of hazardous waste generated;
2. Technical feasibility;
3. Economic evaluation, such as capital cost, operating cost, waste management cost, return on investment (ROI), breakdown point, avoided cost, pretax payback period, or any other economic comparison method;
4. Effects on product quality;
5. Employee health and safety implications;
6. Permits, variances, compliance schedules or applicable state local and federal agencies;

   and
7. Releases and discharges.

If a specific factor does not apply in the evaluation, the Plan must identify that factor as not applicable (N/A). Any pertinentinformation, such as the constituents of wastes streams or the concentrations of constituents, needed to evaluate and implement source reduction measures must be included in the Plan.

How Many Source Reduction Measures Must I Identify?

SB 14 stipulates that the five approaches discussed above shall be considered when developing potential source reduction measures for evaluation. However, it does not stipulate the number or type of measures that must be generated. Each approach may yield several measures or no measures, depending on the nature of the business or activity of a particular generator. Operational improvements and administrative steps are broad approaches that can be applicable to many generators, regardless of size of operation or type of industry. The other three approaches may not have such uniform applicability. While one type of industry may have more use for input changes, others may propose measures based on production process changes.

Methods to Produce Source Reduction Measures

As you try to develop source reduction measures, ask these questions over and over:

1. Why is this waste generated?
2. Why are we doing this operation in this manner?
3. Why are we using these hazardous ingredients?

Then ask:

4. "Are there any substitutes we could use which would produce less waste or be less hazardous?"

For example, some companies have made substantial reductions in the quantity of solvent wastes by eliminating unnecessary cleaning steps in their processes. Large companies may benefit from establishing a committee that meets regularly to brainstorm and use group decision techniques for identifying source reduction methodologies. In order to encourage creativity and independent thinking, seek input from people involved in the waste-generating operation, from the process engineer to the line employee, and from the purchasing, product development and marketing departments.

Sources of Information on Source Reduction Measures

Generators should, on their own, look for sources of background information on source reduction methods. The very first source should be in-house input from employees, operators, supervisors, engineers, plant managers, accountants, bookkeepers, finance managers and others with firsthand knowledge of the company's operations. Other general sources of information are:

- USEPA publications, databases, and technical reference centers
- State and local environmental agencies' publications, bibliographies, and technical assistance
- Published literature, technical magazines, trade journals, government reports, and research briefs
- Equipment vendors and chemical suppliers
- Consultants
- Trade associations

Green Chemistry

Stated most simply, green chemistry is the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances. Fewer hazardous substances means less hazardous waste and a healthier environment.

For more information, go the DTSC*s web page on green chemistry.
http://www.dtsc.ca.gov/PollutionPrevention/GreenChemistry.cfm

Screen Alternatives Before Evaluating

You need consider only potentially viable alternatives. If the list of candidate source reduction measures is extensive, you may screen the measures before beginning any formal evaluation. The screening procedure can range from an informal review to quantitative decision-making.This review serves to eliminate suggested measures that are marginal or inferior without a detailed and more costly technical and economic feasibility study. However, the Plan must include a rationale for rejecting each alternative that you do not analyze in detail [22 CCR Section **67100.5(o)**].

5.7 Information on Selected Source Reduction Measures

The Plan must identify each source reduction measure selected for implementation as a result of the evaluation. The Plan should describe each selected measure in detail, using narratives, photographs, figures and/or data. The description of each selected measure should be in sufficient detail to convey an understanding that would allow other generators to transfer the measure to a site with similar processes, operations or procedures. At a minimum, the seven evaluation factors should be addressed in a narrative where appropriate. The Plan should also address the predicted effect that selected measures would have on the capacity and efficiency of related processes and operations.

If a generator considers information in the Plan a trade secret or proprietary, the pages containing that information should be labeled accordingly. See Chapter 8 for more information on labeling and reporting trade secret information.

5.8 Evaluate Multimedia Effects

SB 14 specifies that implemented source reduction measures can not merely transfer the waste load from one environmental medium (air, land, or water) to another. The Plan must include an evaluation and, to the extent practicable, a quantification of the effects ofthe chosen alternative on all three environmental media.

5.9 List Rejected Measures

The Plan must include a list of source reduction measures that were rejected before undertaking the detailed evaluation. The rationale for their rejection must be stated. Also, if some waste streams were considered to not have viable source reduction alternatives, the Plan must include a brief description of the good-faith effort to identify source eduction alternatives.

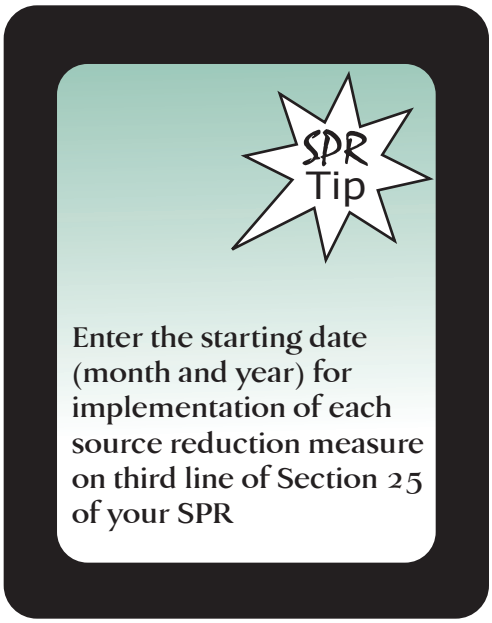
5.10 Schedule Steps Toward Implementation

The Plan must include a timetable for implementation of all selected source reduction measures. The timetable should include, at a minimum, starting and

finishing dates for implementation. A simple action plan with key dates or milestones would be desirable for lengthy or complex projects.

5.11 Set a Numerical Goal

The Plan must specify a four-year numerical goal for reducing the generation of hazardous waste streams by implementing the selected source reduction measures. A goal is a single numerical percentage that reflects the source reduction vision and commitment of the generator to reducing the generation of hazardous waste streams.



The goal would span the next four calendar years, from the beginning of the year when the Plan must be prepared to the end of the next reporting year. For example, the numerical goal in the Plan that must be prepared by September 1, 2011 would span January 1, 2011 through December 31, 2014.

The four-year numerical goal is not simply a reflection of source reduction intentions under SB 14. It is an estimate of the source reduction that the generator would optimally strive to achieve over the upcoming four-year period. The goal must reflect waste stream reductions that are only from source reduction efforts. The goal must exclude effects due to reduced production, outsourcing, waste reclassification, or other unrelated influences.

Calculate the four-year numerical goal (as percent reduction) using the following equation:

Total weight of hazardous and extremely hazardous waste reduced at the site if source reduction practices are optimized

_____ **X 100**

Total weight of hazardous and extremely hazardous waste generated if source redution measures are not implemented.

5.12 Certify the Plan Technical and Financial Certification

The Plan must have a technical certification and a financial certification. The technical certification of the Plan can be completed by any one of the following people:

- an engineer who is registered in California and has demonstrated expertise in hazardous waste management;
- an environmental assessor who is registered in California and has demonstrated expertise in hazardous waste management; or
- an individual in your company who is responsible for the processes and operations of the site, regardless of any professional registrations.

The person performing the technical certification of the Plan must certify all of the following:

- The Plan identifies and addresses all of the major waste streams at the site.
- The five approaches to source reduction have been considered.
- The Plan fully explains the decision process used to determine which measures to implement, including the rationale for rejecting the measures that will not be implemented.
- The Plan includes an implementation schedule.
- The Plan does not merely shift hazardous waste from one environmental medium (air, water, or land) to another by increasing emissions or discharges to air, water, or land.

The following is an example of a Technical Certification Statement:

TECHNICAL CERTIFICATION STATEMENT FOR THE PLAN

(Example format - not required by SB 14)

I certify this Source Reduction Evaluation, Review and Plan meets all of the following requirements:

1. The review and plan addresses each hazardous waste stream identified pursuant to section 67100.5(h), Title 22 of the California Code of Regulations.
2. The review and plan addresses the source reduction approaches specified in section 67100.5(j), Title 22 of the California Code of Regulations.
3. The review and plan clearly sets forth the measures to be taken with respect to each hazardous waste stream for which source reduction has been found to be technically feasible and economically practicable, with timetables for making reasonable and measurable progress, and documents the rationale for rejecting available source reduction measures.
4. The review and plan does not merely shift hazardous waste from one environmental medium to another environmental medium by increasing emissions or discharges to air, water, or land.

_____ _____

Name **Signature**

_____ _____/_____/_____

Title **Mo / Day / Year**

The intent of the financial certification for the Plan is to ensure that the "person who is capable of committing the financial resources necessary to implement the Plan" is aware of its contents and the necessary resource commitment. The financial certification of the Plan must be completed by one of the following people who is capable of committing financial resources necessary to implement the source reduction measures:

- The owner;
- The operator;
- The responsible corporate officer; or
- An authorized individual

The person completing the financial certification for the Plan must sign and date the following language that is required by SB 14:

"I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for making false statements or representations to the Department, including the possibility of fines for criminal violations."

_____ _____

Name Signature

_____ ____/____/____

Title Mo / Day / Year

5.13 Completeness Reminder

In preparing your SB 14 documents for the reporting year 2010, did you remember to:

- Review the Appendix G Completeness Lists to verify document compliance?
- Include a Technical Certification as detailed in Chapters 5 and 6?
- Include a Financial Certification as detailed in Chapters 5 and 6?

These are common but serious omissions. Your Plan and Performance Report are incomplete without the technical and financial certifications.

5.14 Update the Plan and Implementation Schedule

Following the completion of a Plan, a generator may decide not to implement a selected source reduction measure if the generator determines that the selected measure is not technically feasible or economically practicable (22 CCR Section 67100.4(c)). Also, a generator may decide not to implement a selected source reduction measure if attempts to implement the measure reveal that the measure would result in, or has resulted in, any of the following:

- An increase in the generation of hazardous waste;
- An increase in the release of hazardous chemicals to other environmental media;
- Adverse impacts on product quality; and
- A significant increase in the risk of an adverse impact to human health or the environment.

The generator's decision to not implement a selected measure does not require any government approval. However, the generator must amend the Plan within 90 days to reflect the decision to not implement a selected measure. The amendment to the Plan must include proper documentation identifying the rationale for the decision. The amendment can be in the form of an addendum, dated and signed by the individual qualified to technically certify the plan, and incorporated into the Plan by reference.

Chapter 6
The Performance Report

6.1 Before Preparing the Report

Generators subject to SB 14 shall prepare a performance report with sufficient details to convey an understanding of the hazardous waste management approaches used at the site (22 CCR Section 67100.8).

The Hazardous Waste Management Performance Report (Performance Report) documents a generator's current efforts and effectiveness in managing hazardous waste. The Performance Report includes discussions of the generator's approaches to managing hazardous waste including source reduction, on-site and off-site recycling, treatment and disposal. It can also serve as a way for the generator to share with the public all of the positive efforts made to improve the management of hazardous waste at the generator's site.

The Performance Report should contain sufficient detail to convey an understanding of the hazardous waste management approaches used at the site. The use of narratives, photographs, illustrations, figures and data is encouraged. Keep in mind that the public has the authority to review your Performance Report.

A generator who qualifies as a small business, and who is also required by 22 CCR Section 66262.41 to prepare a USEPA biennial generator report (BGR), may use the most recent BGR as the Performance Report required by SB 14.

6.2 General Site Information

The Performance Report must contain the following general facility information:

- Name of the site.
- Location of the site including the street address, city, county and zip code for the site. In the case of multiple sites, identify all sites by street address, city, county and zip code for each site location.
- Four-digit Standard Industrial Classification (SIC) code applicable to activities at the site. A list of SIC codes is in Appendix C. Use the one code that best describes the operations occurring at the site. The SIC code should be the same as the code used for the Plan.

If a generator owns multiple sites with similar operations and chooses to prepare a multisite Performance Report, only one SIC code should be used to represent all

sites. However, any site that contains different operations, different processes or different waste streams cannot be covered by the multisite Performance Report. A separate Report must be completed for each site not covered by the multisite Report. If a generator owns a complex site with multiple operations managed as independent businesses and chooses to prepare a separate Performance Report for each operation, an SIC code must be provided for each operation.

- North American Industry Classification System (NAICS) code. Go to http://www.naics.com to determine your facility's NAICS Code.

Chronicle Your Site's Waste Management History

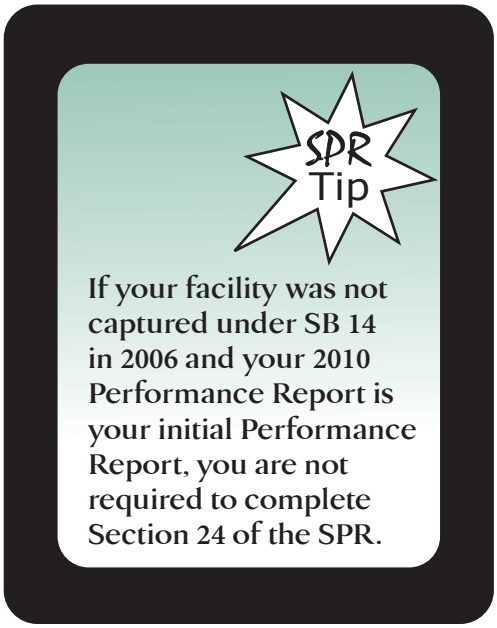
As each new Performance Report is prepared every four years, the generator might benefit by including a historical chronology or summary list of waste management methods and source reduction efforts from previous Performance Reports. This would profile the past effort and success, which could provide useful support for projected effort and success. It could also be a historical overview for evaluation by generator staff and regulatory compliance inspectors.

This would be consistent with one of the original Performance Report objectives, which was to help generators document their waste management history and track past practices that were beneficial.

Each new Report must also focus on the latest waste management approaches used over the past four years. Generators should discuss this most recent activity in the greatest detail as it represents their latest progress.

6.3 Baseline Year and Reporting Year

The Performance Report focuses on the major hazardous waste streams identified in the Plan and compares the quantity of hazardous waste generated during the reporting year (**2010**) with the quantity of hazardous waste generated during the baseline year if a plan was required in **2006**.



Baseline year means any of the following, whichever is applicable:

1. For a generator's initial Performance Report, the baseline year is the calendar year, selected by the generator, for which substantial data is available on hazardous waste generation, on-site management, or off-site management. However, the generator may select the current reporting year as the baseline year for their initial report. If that is done, the generator would not provide a performance comparison of the baseline year with the reporting year because both are the same year.

2. For all subsequent reports, the baseline year is the reporting year of the immediately preceding Performance Report. For example, if the generator was required to prepare SB 14 documents for reporting year **2006**, the baseline year for the Performance Report due in **2011** would be **2006**. Reporting year refers to the calendar year immediately preceding the year in which the Performance Report is to be prepared. For the Performance Report due September **1, 2011**, the reporting year is **2010**.

As indicated above under "Baseline year", if a generator, who is preparing their initial Performance Report for reporting year **2010**, selects the current reporting year as the baseline year, the information required for each waste stream shall be provided for the current reporting year only.

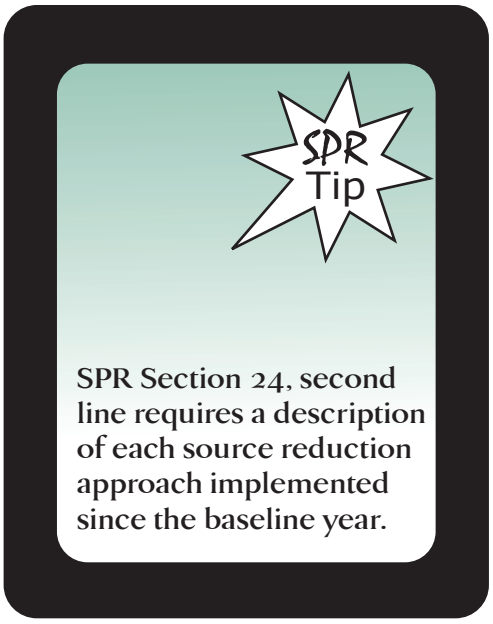
6.4 Compare Quantities of Major Waste Streams

For each major waste stream, the Performance Report must contain the following information:

- An estimate, in pounds, of the quantity of hazardous waste generated, and the quantity of hazardous waste managed, both on-site and off-site, during the current reporting year.
- An estimate, in pounds, of the quantity of hazardous waste generated, and the quantity of hazardous waste managed, both on site and off site, during the baseline year.

An example of a typical format is shown in Table **2** on the following page.

6.5 Describe Waste Management Approaches



"Hazardous waste management approaches" means methods and techniques of controlling the generation and handling of hazardous waste. Approaches include source reduction, on-site and off-site recycling, on-site and off-site treatment, and disposal. For each major waste stream, the Performance Report must contain the following information:

- A description of current hazardous waste management approaches. The current approaches described for the **2010** Performance Report are those approaches implemented during the current reporting year, calendar year **2010**.
- The identification of all approaches implemented since the baseline year. If

Table 3. Hazardous Waste Management by Approach

(Example format --- not required by SB 14)

Major Waste Stream[1]	CWC	Hazardous Waste Management Approaches[2]	Weight, lbs. (Baseline Year 2006)	Weight, lbs. (Reporting Year 2010)

(1) If a single major waste stream is managed using more than one waste management approach, use additional rows in Table **3** to quantify the weights managed by each approach during the baseline year and the reporting year

(2) "Hazardous waste management approach" means the approach, method, or technique of managing the generation and handling of a hazardous waste since the baseline year. For each major waste stream listed in Table **3**, indicate one or more of the following hazardous waste management approaches.

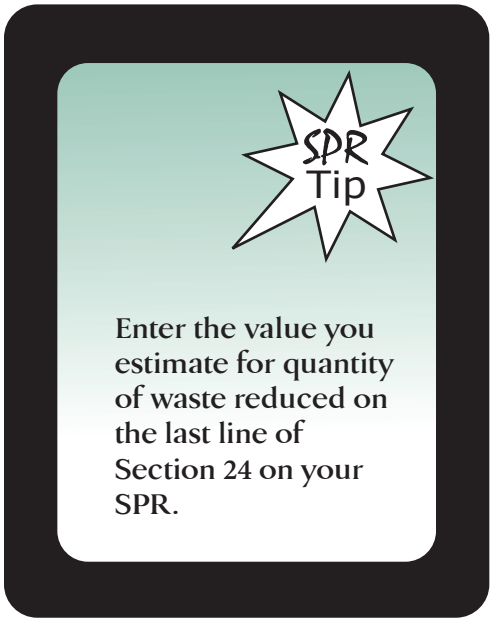
a. source reduction
b. onsite or offsite recycling, or
c. onsite or offsite treatment, or
d. onsite or offsite disposal

the 2010 Performance Report is the generator's initial Performance Report and the current reporting year is selected as the baseline year, the Performance Report will have met this requirement in the description of current hazardous waste management approaches. If the generator's initial Performance Report was prepared prior to 2011, the 2010 Performance Report must identify all approaches implemented since calendar year 2006.

6.6 Assess the Effect of Waste Management Approaches

For each major waste stream, the Performance Report must contain an assessment of the effect, since the baseline year, of each implemented hazardous waste management approach on each of the following:

- The weight of hazardous waste generated
- In the textbox on the next page, "Quantify Source Reduction Achieved" has ideas on how to quantify the effect of source reduction on the weight of hazardous waste generated;
- The properties which cause the waste to be classified as a hazardous waste;
- The on-site management of hazardous waste; and
- The off-site management of hazardous waste.



The assessments should cover any changes in the management of each major hazardous waste stream. The Performance Report should clearly identify the hazardous waste management approach that was implemented, and the impact of that approach on the management of the waste. For example, an approach may change the physical characteristics of the waste, which in turn affects how hazardous waste technicians handle the waste.

6.7 Describe Factors Affecting Major Waste Streams

For each major hazardous waste stream, the Performance Report must contain a description of factors that have affected hazardous waste generation and management from the baseline year to the reporting year. Some factors may have caused an increase in waste generation, such as increased manufacturing production. The rate of production and resulting amount of hazardous waste generated at a site can change dramatically over time. SB 14 does not penalize a generator for generating more waste. However the Performance Report should clearly describe the increase and evaluate why the increase occurred. To ensure a fair comparison between the current reporting year and the baseline year, the Performance Report must include a detailed description of factors affecting the generation, on-site management, and off-site management of major hazardous waste streams.

Quantify Source Reduction Achieved

For each major waste stream where one or more source reduction procedures have been implemented, estimate the amount of waste that will not be generated annually due to the implementation of source reduction. The generator must determine the most appropriate method for estimating source reduction achieved, which is to be quantified in pounds per year. The method of determining this value may depend on the type of waste stream, operational factors, business activity, economic factors, and other business- or operation specific influences. There is no single approach for estimating source reduction achieved that would be appropriate for all facilities.

Methods that one might consider using to estimate source reduction achieved for each major waste stream include:

1. **Simple Subtraction**. Subtract the hazardous waste generated in 2010 from that generated in 2006. This simple subtraction would be best applied to waste streams whose change in quantity was mostly due to the source reduction measures implemented, and not because of other factors, such as changes in business activity. However, if hazardous waste generation increased from 2006 to 2010 due to increased business activity, simple subtraction would not be the most accurate way to report source reduction achieved.

2. **Normalize Then Subtract.** Normalize your hazardous waste generation for 2006 and 2010 using the most appropriate normalization method for your business operations (e.g., pounds of waste per 1000 units). Then subtract the normalized 2010 data from the normalized 2006 data. For example, a metal finisher may consider normalizing generation of waste plating bath solution based on pounds of spent bath per 100- square-feet of surface area plated. After determining the difference, make the appropriate calculations and assumptions to report the value in terms of pounds per year.

3. **Quantify After Implementing Source Reduction**. Quantify hazardous waste generation before implementing a source reduction measure to establish a baseline number. Then quantify a year's worth of hazardous waste generation data after implementing source reduction and subtract this number from the annual baseline number.

4. **Quantify Based On Normalized Data.** Use normalization to determine source reduction quantity after implementing a source reduction measure, then use production data to estimate an annual amount. For example, a generator determines that they produced 5 less pounds of a hazardous waste stream for every 1000 widgets produced. They can estimate pounds per year source reduction based on the number of widgets produced in a year.

5. **Use Percentage Decrease.** Use the same units of measure to quantify hazardous waste generation before and after implementing a source reduction procedure. Then calculate a percentage that represents the decrease in hazardous waste generation. A pounds per year source reduction amount can be estimated using the percent decrease and an annual hazardous waste total that represents hazardous waste generation prior to implementing the source reduction procedure.

Factors that can influence generation and management of hazardous waste may include:

1. Changes in business activity (production rate)
2. Changes in waste classification by the government
3. Natural phenomena
4. Other factors that have affected either the quantity of hazardous waste generated or on-site and off-site hazardous waste management requirements.

As mentioned in Section **6.3** of this Chapter, if the Performance Report for reporting year **2010** is the generator's initial Performance Report, then the generator may also use **2010** as the baseline year. As stated in Section **6.3**, this would preclude a performance comparison of the baseline year with the reporting year.

6.8 Certify the Performance Report

The Performance Report must also have a technical certification and a financial certification. The technical certification can be completed by any one of the following personnel:

1. An engineer who is registered in California and has demonstrated expertise in hazardous waste management;
2. An environmental assessor who is registered in California and has demonstrated expertise in hazardous waste management; or
3. An individual in your company who is responsible for the processes and operations of the site, regardless of any professional registrations.

The person performing the technical certification of the Performance Report must certify that the Performance Report identifies the factors that affect the generation, on-site management, and off-site management of hazardous wastes and summarizes the effect of those factors on the generation, on-site management, and off-site management of hazardous wastes.

The following is an example of a technical certification statement:

TECHNICAL CERTIFICATION STATEMENT FOR THE PERFORMANCE REPORT (Optional Format)

I certify this Hazardous Waste Management Performance Report identifies factors that affect the generation and on-site and offsite management of hazardous wastes and summarizes the effect of those factors on the generation and on-site and off-site management of hazardous wastes.

_____ _____
Name **Signature**

_____ _____/_____/_____
Title **Mo / Day / Year**

The intent of the financial certification for the Performance Report is to ensure that the "person who is capable of committing the financial resources necessary to implement the Performance Report" is aware of its contents and the necessary resource commitment. The financial certification of the Performance Report must be completed by any one of the following people who is capable of committing financial resources necessary to implement the source reduction measures:

- The owner;
- The operator;
- The responsible corporate officer; or
- An authorized individual.

The person completing the financial certification in the Report must sign and date the following language that is required by SB 14:

"I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for making false statements or representations to the Department, including the possibility of fines for criminal violations."

_____ _____
Name **Signature**

_____ _____/_____/_____
Title **Mo / Day / Year**

6.9 Completeness Reminders

If you are required to prepare SB 14 documents, and you have completed the documents for the reporting year **2010**, did you remember to:

- Review the Appendix G Completeness Lists to verify document compliance?
- Include a Technical Certification as detailed in Chapters **5** and **6**?
- Include a Financial Certification as detailed in Chapters **5** and **6**?

These are common but serious omissions. Your Plan and Performance Report are incomplete without the technical and financial certifications.

A Source Reduction Success - Century Laminators, Inc.

Century Laminators, Inc. is a small (about 140 employees) printed circuit board manufacturer located in Anaheim. Although Century Laminators had already implemented some source reduction opportunities, the structured, systematic approach of SB 14 provided added benefit.The source reduction plan submitted to OPPGT by Mr. Chris Hensley, facility manager, scheduled the following source reduction options for implementation:

- increase concentration of copper in etchant. This would result in an annual savings of$9,200, and reduce waste by 10% (37 tons).
- reduce cleaning schedule. This would result in an annual savings of $7,700, and would reduce sludge production by 2% (1.5 tons/year).
- install automatic flow sensors for rinses. This would result in an annual savings of $8,250, and would reduce the potential for operator error that would increase sludge generation.
- install automatic fluid dispensers (floor cleaner). This would result in an annual savings of $8,850. Operator error had resulted in excess sludge generation due to improper mixing of the floor cleaner.
- install panel sensors on conveyorized processing equipment. This would result in an annual savings of $2,455.
- modify oxide racks to increase drainage efficiency (cost benefit not quantified).
- increase rack drip times. Potential reduction of dragout of 50%.

In August of 1998, OPPGT requested follow-up information from Century Laminators, Inc. Mr. Hensley, now the Vice President of Business Development, is enthusiastic about the source reduction planning program. In a letter to OPPGT, he states "The program has in fact been instrumental in changing our thinking in terms of modifying what we currently do, and in evaluating processes, equipment, and chemistries for future use. The modifications that were completed first due to their ease of implementation and low cost were not the greatest opportunities for reduction, but they did provide a smooth transition into the program and were carried out with enthusiasm and precision. These included increased drip times on our oxide line, rack modifications, and the installation of an automatic floor cleaning dispenser." Century Laminators, Inc.'s manifest data indicate source reduction progress:

Ship Year	Total Tons
1995	525
1996	459
1997	481
1998	283

Century Laminators' 1998 waste showed a 38% decrease from 1996 levels. These figures give us some idea of the effects of Century Laminators' source reduction efforts.

Chapter 7 The Summary Progress Report

7.1 Background

The Hazardous Waste Source Reduction and Management Review Act of 1989, also known as SB 14, requires hazardous waste generators to consider source reduction as the preferred method of managing hazardous waste. SB 14 promotes source reduction over recycling, treatment, and disposal. Source reduction avoids the generation of hazardous wastes, as well as its associated management liabilities and adverse impacts to public health and the environment.

The Guidance Manual for Complying with the Hazardous Waste Source Reduction and Management Review Act of 1989 (2010 edition) explains SB 14 requirements for generators and is referenced throughout this document. Generators are strongly encouraged to obtain a copy of the Guidance Manual to determine if they are captured by SB 14 and to ensure that they satisfy all of the requirements. **The Summary Progress Report is one of the documents required by SB 14.**

SB 14 applies to generators that, by site, routinely generate through ongoing processes and operations, more than 12,000 kilograms of hazardous waste or 12 kilograms of extremely hazardous waste in a reporting year. Chapter 2 of the Guidance Manual explains the process of determining if a facility is captured under SB 14, defines terminology specific to SB 14, and lists waste streams that are exempted or otherwise excluded from SB 14 requirements. The current SB 14 reporting year is calendar year 2010.

7.2 SB 14 Reporting Requirements

Generators who are subject to SB 14 in reporting year 2010 are required to satisfy SB14 reporting requirements by September 1, 2011. Generators subject to SB 14 must conduct a source reduction evaluation at their facility and prepare the three following documents:

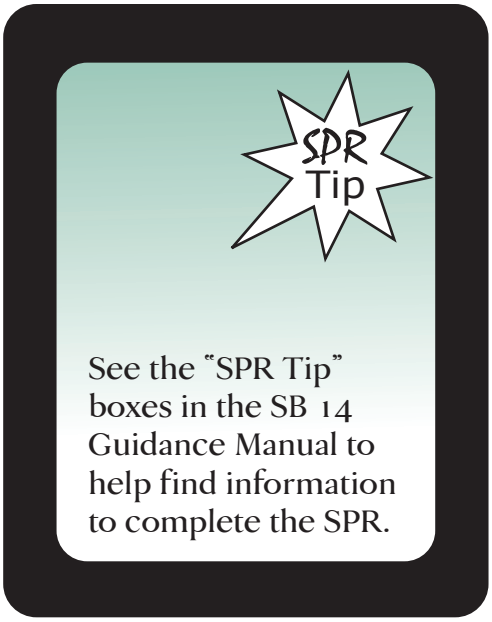
- Prepare and retain the Source Reduction Evaluation Review and Plan (Plan) as described in Chapter 5 of the Guidance Manual;
- Prepare and retain the Hazardous Waste Management Performance Report (Performance Report) as described in Chapter 6 of the Guidance Manual; and
- Prepare and submit the Summary Progress Report (SPR) as described herein.

As explained in Chapter 4 of the Guidance Manual, facilities that are subject to SB14 and meet the definition of a small business (California Government Code Section 11324.610) have the option to complete a Compliance Checklist in place of the Plan. In place of the Performance Report, a small business can use their most recent biennial generator report (BGR), as required by California Code of Regulations Section 66262.41.

When preparing SB 14 documents, keep in mind that the SPR **is a summary of the information contained in your Plan and Performance Report, or your Compliance Checklist. For this reason, the SPR should be prepared after the Plan and Performance Report, or the Compliance Checklist, have been completed.**

7.3 SPR Reporting and Submittal Requirements

SB 14 legislation mandated the preparation and submittal of the SPR starting September 1, **1999**, and every four years thereafter. The submittal is done on DTSC Form **1262**, as provided in this document. The form is also available on the DTSC website. The form is virtually identical to the **2006** version and requires basically the same information. DTSC Form **1262** "Summary Progress Report" consists of Table 1 and Table 2. Generators should read all the instructions carefully before completing Tables 1 and 2. **All SB 14 generators, including small businesses, are required to prepare and submit the SPR to DTSC by September 1, 2011.**



7.4 Completing the SPR

The SPR requires quantitative data and some narrative description. This is your opportunity to document your source reduction successes over the last four years. To accurately prepare the SPR, you will need to obtain information from your SB 14 Plan and Performance Report documents for the **2006** and **2010** reporting years. To help generators accurately complete the SPR, "SPR Tips" boxes were added to the Guidance Manual (in the **2006** edition).

Before completing your SPR, please note the following:

- If a generator was required to submit an SPR for **2006** and is also required to prepare one for **2010**, the generator must complete information for both **2006** and **2010**.
- If a generator was not required to submit an SPR for **2006**, but is required to report for **2010**, the generator must fill out only form items for **2010** and not for **2006**. This generator is not required to complete the accomplishments portion (Section 24) of Table 2.
- If a generator was required to report only for **2006** and not for **2010**, the generator is not subject to SB 14 and is not required to prepare and submit the SPR.

Table 1 of the SPR requests general information and total hazardous waste generation data for calendar years **2006** and **2010**. Table 1 also requests a brief summary and comments on your organization's historical source reduction successes and waste management practices. Your comments can also include reuse, recycling, treatment, and disposal activities. If more space is needed for comments, please add a separate page to provide complete information.

Since the information requested in Table 1 is for the entire facility, Table 1 is only completed once for each site. If your company has more than one site, and the processes and generated wastes are similar at each location, you may list the sites' individual USEPA or DTSC identification numbers on Table 1 and consolidate the waste stream types and quantities from site to site on Table 2. This will allow for a "multi-site" document instead of preparing individual SPRs for each location. Table 2, Section 24 addresses accomplishments by specific waste stream, as achieved over the last four year period 2006-2010. This information can be obtained from your 2010 Performance Report. Table 2, Section 25 addresses projections by specific waste stream covering the next four year period 2011-2014. Use your 2010 Plan to obtain information for Section 25. Since the information required for Table 2 is waste stream-specific, **a separate Table 2 must be completed for each major waste stream and for each minor waste stream for which a source reduction measure was selected.**

Note that SPR Form 1262 is also to be used to report extremely hazardous waste. If you have identified extremely hazardous waste in your 2006 or 2010 source reduction documents, please complete a separate copy of Form 1262 for your extremely hazardous waste streams and indicate their description in Table 2, Section 21.

Also note that the SPR is not confidential and OPPGT will make all SPR forms available to the public upon request. If a trade secret issue is involved, follow the procedure discussed in Chapter 8 of the Guidance Manual.

7.5 Solutions to Common SPR Mistakes

September 1, 1999 was the first time that generators subject to SB 14 were required to prepare and submit an SPR to DTSC. Following that deadline, OPPGT evaluated all submitted SPRs for accuracy and completeness. The most common mistakes were:

1. Differentiating hazardous waste streams that are pretreated on site, and then discharged, from those that are not. Hazardous waste streams that are pretreated on site, then subsequently discharged via the sewer system to a publicly owned treatment works or to a receiving water under a National Pollutant Discharge Elimination System (NPDES) permit, are now referred to as Category A wastes in the Guidance Manual. This type of waste stream was formerly called "aqueous waste." All other hazardous waste streams subject to SB 14, which were formerly called "nonaqueous wastes," are now referred to as Category B wastes. These terminology changes are relevant to Sections 15, 16, and 23 of SPR Form 1262.
2. Estimating source reduction achieved (i.e., the amount of waste reduced due to implementing source reduction).

The last item in Table 2, Section 24 of the revised SPR Form asks the generator to **estimate the quantity of waste reduced annually as a result of implementing a source reduction procedure**. No single method of estimating this value is appropriate for all facilities or all waste streams. In Chapter 6 of the Guidance Manual (2010 edition), there is a page titled "Quantify Source Reduction Achieved," which provides examples that a generator might consider using to estimate their annual waste reduction, in pounds per year, due to implementing one or more source reduction measures on a specific waste stream.

7.6 Send Completed SPR to OPPGT

By the September 1, 20011 submittal deadline, please mail your completed Summary-Progress Report Form 1262 for the 2010 reporting year to:

Department of Toxic Substances Control
Office of Pollution Prevention and Green Technology
Source Reduction Unit
P.O. Box 806, 12th Floor
Sacramento, California, 95812-0806

An electronic downloadable version of the SPR is available online at DTSC's web site, www.dtsc.ca.gov and may be submitted electronically to the DTSC's emailbox, sb14@dtsc.ca.gov., or by regular mail.

After September 1, 2011, DTSC will undertake review of all SPR forms received by that deadline date. DTSC will process and compile collected information for use in analyzing statewide hazardous waste reduction trends. The database may be used to prepare fact-sheets, industry specific assessment reports, and reports documenting the progress of California's generators towards reducing hazardous waste. DTSC will also use the collected information to estimate statewide hazardous waste source reduction progress. This information may also be used to report to the Legislature on statewide source reduction success.

7.7 Assistance and DTSC Publications

If you have questions regarding the SPR or the SB 14 program, please contact the Source Reduction Unit at 1.800.700.5854. Inquiries can also be e-mailed to sb14@dtsc.ca.gov.

Contact OPPGT if you need to obtain additional copies of this Summary Progress Report publication No. 003. SPR form 1262 and supporting instructions are also incorporated into Chapter 7 of the Guidance Manual and in the Compliance Checklist (2010 editions). OPPGT will mail printed publications upon request. The publications are also available for you to print from the DTSC web site http://www.dtsc.ca.gov/PollutionPrevention/index.html.

State of California – California Environmental Protection Agency | Department of Toxic Substances Control

SB 14 SUMMARY PROGRESS REPORT

TABLE 1: GENERAL INFORMATION Date _____

A hazardous waste generator subject to SB 14, is required to complete and submit Tables 1 and 2 to the Department of Toxic Substances Control by September 1, 2011. The generator is to submit only one Table 1. However, the generator may need to submit more than one Table 2, (one for each reportable waste stream).

See Summary Progress Report publication or SB 14 Guidance Manual Chapter 7, for assistance.

(1) NAME OF GENERATOR, FACILITY, or BUSINESS	☐ (1a) MULTI-SITE? (If this is a multi-site business, please check this box and list the primary EPA ID number under box #2 and add the remaining EPA ID numbers under "COMMENTS" below. Combine data for similar wastes from the multiple sites for the remainder of the Summary Progress Report).	
(2) EPA ID NO.	(3) SIC CODE	(4) NAICS CODE
(5) STREET ADDRESS	(6) CITY	(7) COUNTY
(8) MAILING ADDRESS	(9) CITY	(10) ZIP CODE
(11) CONTACT NAME		(12) CONTACT PHONE
(13) TYPE OF BUSINESS, OPERATION, or ACTIVITY		

(14) SB 14 reportable total quantities of Hazardous Waste Generated at Site, for 2006 and 2010 Reporting Years.

Reportable Total Quantities include all hazardous wastes subject to SB 14.

Do not include nonroutinely generated, exempted, or secondary wastes. Exempted and nonroutinely generated wastes are listed in Section 67100.2(c), Title 22, California Code of Regulations. Secondary waste is a hazardous waste sludge or precipitate that is generated as a result of onsite treatment of liquid hazardous waste that is sent to a POTW or receiving water under NPDES permit.

Obtain information requested below from your 2006 and 2010 Plans or Compliance Checklists.	2006	2010
(15) SB 14 hazardous waste processed onsite in a wastewater treatment unit for discharge to POTW or NPDES permit (Category A*) Total:	lbs	lbs
(16) All other SB 14 hazardous waste (Category B*) Total:	lbs	lbs
(17) All extremely hazardous waste Total:	lbs	lbs

* Category A was previously referred to as aqueous waste. Category B was previously referred to as nonaqueous waste.

(18) COMMENTS regarding hazardous waste source reduction and recycling activities (add page if needed).

TABLE 2: SPECIFIC WASTE STREAM INFORMATION

DATE _____

Complete and submit a separate Table 2 for each major hazardous waste stream and for each minor hazardous waste stream for which a source reduction measure was selected.

IDENTIFICATION

(19) NAME OF GENERATOR, FACILITY, or BUSINESS	(20) EPA ID NO.
(21) HAZARDOUS WASTE STREAM DESCRIPTION	(22) CALIFORNIA WASTE CODE CWC _____

(23) THIS HAZARDOUS WASTE IS (please check one):

____ Processed onsite in a wastewater treatment unit for discharge to POTW or NPDES permit (Category A)

____ Other SB 14 hazardous waste (Category B)

____ Extremely hazardous waste

ACCOMPLISHMENTS

Your 2006 SB 14 Plan, Performance Report, or Compliance Checklist, has this information.

(24) Provide the following information for this waste stream:

How much waste was generated in the 2006 Reporting Year? _____ pounds

Describe the source reduction measure(s) implemented since 2006 (add page if needed): _____

_____

Estimate when this source reduction measure was implemented: _____ Month _____ year

For this measure, what source reduction quantity was projected in the 2006 Plan: _____ pounds per year

Estimate the quantity of waste reduced annually by this measure since implementation: _____ pounds per year

(See Summary Progress Report publication or SB 14 Guidance Manual Chapter 6, to help estimate hazardous waste reduced.)

PROJECTIONS

Your 2010 SB 14 Plan or Compliance Checklist has this information.

(25) Provide the following information for this waste stream:

How much waste was generated in the 2010 Reporting Year? _____ pounds

Describe the source reduction measure selected to be implemented By 2014: (Add page if needed.) _____

_____

Estimate when this source reduction measure will be implemented: _____ month _____ year

What is the annual projected source reduction quantity identified in the 2010 Plan? _____ pounds per year

Chapter 8 Public Access and Trade Secrets

8.1 Availability of Source Reduction Documents

With the exception of the SPR, Plans and Reports are not sent to DTSC upon completion. However, a generator must keep a copy of the Plan, Report, and SPR at the generator's site and, upon request, present the documents to any authorized representative of DTSC; or to the local unified program agency who is authorized to conduct an inspection. The generator is subject to a fine of **$1,000** per day for failure to provide required source reduction documents upon request.

A copy of the Plan, Report, and SPR must be available locally for public review. The source reduction documents can be kept at the generator's site, a public library, or the office of a local governmental agency willing to act as a repository for the documents.

8.2 Protecting Trade Secrets

A generator may claim any information submitted to DTSC under SB **14** as confidential. When DTSC requests a generator to submit a source reduction document containing confidential information, the generator must make a claim of confidentiality by placing the words "confidential business information" on each page containing the confidential information. If the generator does not make a claim of confidentiality, DTSC can make the information available to the public without notifying the generator.

When DTSC requests a generator to submit a source reduction document containing confidential information, the generator must submit two versions of the document. One version must contain the confidential information. The generator must remove the confidential information from the second version and clearly indicate which pages have been removed. The generator is responsible for removing trade secrets from the documents held onsite before fulfilling a general public request to view the documents.