

The New Jersey Community Right to Know Program Toxic Chemical Use at Some of New Jersey's Largest Facilities

This data fact sheet is a preview of the 2010 data reported by New Jersey companies under the New Jersey Worker and Community Right to Know (W&CRTK) Act and regulations. The information includes two types of toxic and hazardous chemical data. One type of data are called materials accounting, or chemical use, data. These data, collected on the Release and Pollution Prevention Report (RPPR), provide an understanding of how hazardous substances are used at and move through an industrial facility during a calendar year. Materials accounting is comprised of many data elements to present this picture (Table 1). The three main components presented here are Use, Nonproduct Output (NPO), & Releases (Figure 1).

Table 1. 2010 RPPR Data – Key Components of Chemical Use (pounds)

Number of Facilities	407
Number of Substance Reports	1,524
USE	16,060,246,191
Consumed	2,456,499,313
Shipped as (or in) Product	13,428,395,594
Nonproduct Output	175,351,284
On-Site Releases	12,717,976
On-Site Management	117,620,785
Off-Site Transfers	45,126,733
On-Site Releases	12,717,976
Stack Air Emissions	3,196,284
Fugitive Air Emissions	908,357
Surface Water Discharges	8,496,961
Ground Water Discharges	0
Land Disposal On Site	116,373

Table 2. Top 10 Industry Groups for Chemical Use - 2010

NAICS CODE	Description	# of Facilities	# of Reports	USE (pounds)
324	Petroleum & Coal Products Manufacturing	18	135	8,650,291,313
424	Chemical & Petroleum Wholesalers	27	229	5,020,799,279
325	Chemical Manufacturing	124	549	1,735,409,779
331	Primary Metal Manufacturing	32	116	443,576,079
326	Plastics and Rubber Products Manufacturing	22	43	106,630,889
332	Fabricated Metal Products Manufacturing	40	114	56,155,886
221	Electrical Utilities	14	97	12,431,194
336	Transportation Equipment Manufacturing	5	11	10,298,443
322	Paper Manufacturing	11	27	4,904,024
327	Nonmetallic Mineral Product Manufacturing	21	36	4,401,008

Use: Use is the quantity of hazardous substances processed at the facility. Use is calculated by adding together the quantity consumed in processes, the quantity shipped as (or in) product, and the quantity generated as NPO.

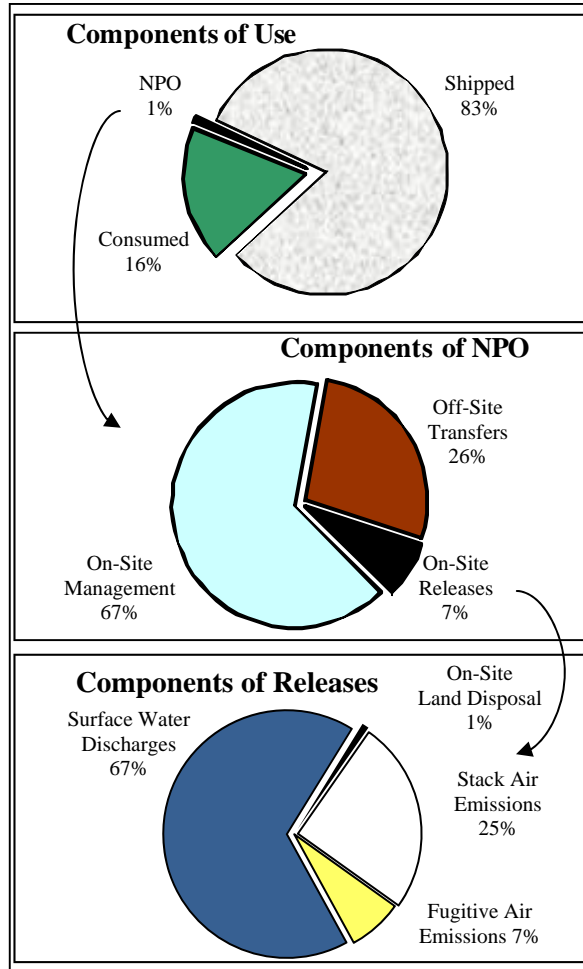


Figure 1. Toxic Chemical Use - 2010

Table 3. Top Industry Groups for Nonproduct Output - 2010

NAICS CODE	Description	# of Facilities	# of Reports	NPO (pounds)
325	Chemical Manufacturing	124	549	100,514,855
331	Primary Metal Manufacturing	32	116	28,988,886
324	Petroleum & Coal Products Manufacturing	18	135	16,053,585
332	Fabricated Metal Products Manufacturing	40	114	11,437,895
221	Electrical Utilities	14	97	6,120,475
322	Paper Manufacturing	11	27	1,915,898
339	Miscellaneous Manufacturing	15	26	1,737,180
311	Food Manufacturing	17	29	1,675,123
327	Nonmetallic Mineral Product Manufacturing	21	36	1,130,687
336	Transportation Equipment Manufacturing	5	11	1,118,568

Nonproduct Output (NPO): NPO is the quantity of hazardous substances that were generated prior to storage, out-of-process recycling, treatment, control or disposal, and that were not intended for use as a product. NPO is calculated by adding the quantities of on-site releases, managed on-site, and off-site transfers.

On-Site Releases: On-site releases include those quantities of hazardous substances that were released as stack and fugitive air emissions, discharged to surface waters and ground waters, and on-site land disposal.

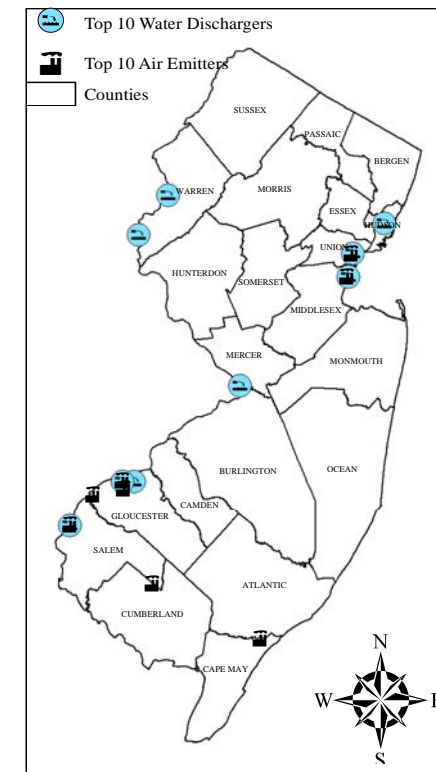


Figure 2. Locations of Facilities for the Top 10 Total Air Emissions & Top 10 Surface Water Discharges

What does the RPPR Data Show?

Petroleum and Coal Products Manufacturing accounted for 54% of toxic chemical Use in 2010 and 56% of Shipped as (or in) Product. Figure 3 presents the distribution of substances Shipped as (or in) Product by industry sector in 2010. Four main industry sectors account for 99% of toxic chemical shipments.

On-site releases for some industry sectors increased substantially resulting in a 23% increase, from 10,349,849 pounds in 2009 to 12,717,976 in 2010. In 2010 all elements of NPO (on-site releases, on-site management and off-site transfers) were greater than in 2009 (see Table 1). Also, fugitive emissions & surface water discharges were greater in 2010.

Chemical manufacturers accounted for both 57% of all Nonproduct Output and for 50% of Releases in 2010.

Statewide surface water discharges continue to dominate the release category.

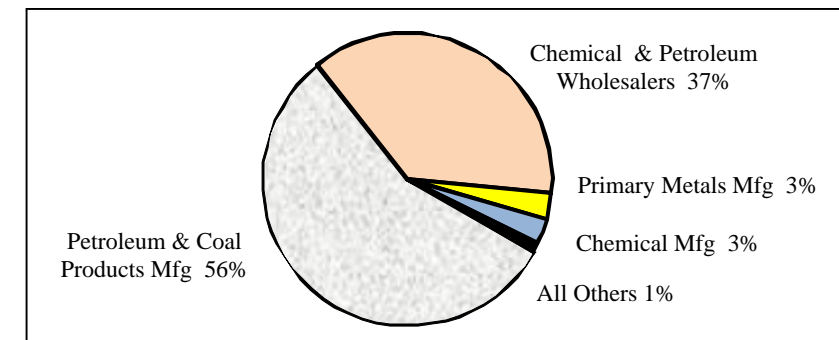


Figure 3. Percent of Toxics Shipped by Industry Sector - 2010 RPPR

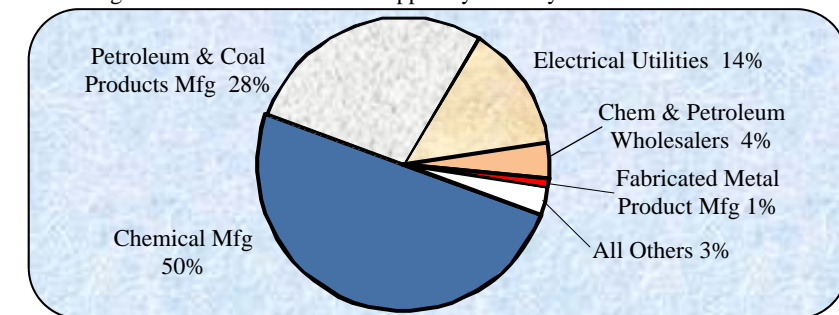


Figure 4. Percent of Toxics Released by Industry Sector - 2010 RPPR

Hazardous Substance Inventory at New Jersey Facilities

The other type of information collected on hazardous substances are called chemical inventory data. These data, collected annually on the Community Right to Know (CRTK) Survey and due by March 1 for the previous year, provide information on hazardous substances present at facilities during the reporting year. These data are useful for communities and emergency management and emergency response personnel. Table 4 presents the number of facilities by county and the number of hazardous substance listings reported by those facilities for 2010. Table 5 shows a list of the top 10 industry groups, by the number of facilities, that reported hazardous substance inventories for 2010. Table 6 shows the top 20 most frequently reported substances for 2010. These data show that 71 % of all hazardous substance reports are for the top 20 substances for 2010.

Table 4. The Number of CRTK Facilities and Hazardous Substances Reports Submitted by County - 2010

COUNTY	# of Facilities	# of Reports
BERGEN	850	2,939
MIDDLESEX	811	3,574
ESSEX	574	2,527
MORRIS	535	1,737
UNION	486	2,769
PASSAIC	470	1,587
MONMOUTH	469	1,369
BURLINGTON	414	1,441
HUDSON	385	1,390
CAMDEN	379	1,255
MERCER	333	1,005
OCEAN	329	848
SOMERSET	317	1,665
GLOUCESTER	254	1,568
ATLANTIC	186	499
HUNTERDON	168	556
SUSSEX	156	394
CUMBERLAND	152	568
WARREN	142	663
CAPE MAY	78	211
SALEM	70	697
Total:	7,558	29,262

Table 5. Top 10 Industries by Number of Facilities — 2010 CRTK Survey

NAICS CODE	NAICS Description	# of Facilities	# of Substances	# of Reports
447	Gasoline Stations	1,986	35	3,738
517	Telecommunications	611	14	1,288
812	Personal & Laundry Services	589	29	713
325	Chemical Manufacturing	385	328	4,950
424	Merchant Wholesalers, Nondurable Goods	366	228	2,017
811	Repair & Maintenance	323	94	978
441	Motor Vehicle & Parts Dealers	283	75	1,173
221	Utilities	247	49	1,151
332	Fabricated Metal Product Manufacturing	217	98	1,421
423	Merchant Wholesalers, Durable Goods	192	112	981

Table 6. The Top 20 Most Frequently Reported Environmental Hazardous Substances on the 2010 Community Right to Know Survey at any Inventory Quantity

CAS #	SUBSTANCE NAME	# of Facilities	# of Reports
68476-34-6	DIESEL FUEL OR #2 HEATING OIL	2,535	3,396
8006-61-9	GASOLINE	2,692	2,960
7664-93-9	SULFURIC ACID	1,823	2,401
7439-92-1	LEAD	1,877	2,104
107-21-1	ETHYLENE GLYCOL	1,215	1,952
74-98-6	PROPANE	1,142	1,478
67-56-1	METHANOL	498	829
127-18-4	TETRACHLOROETHYLENE	641	736
108-88-3	TOLUENE	293	671
1330-20-7	XYLENE (MIXED ISOMERS)	274	558
74-86-2	ACETYLENE	496	538
N230	GLYCOL ETHERS (EXCEPT SURFACTANTS)	152	459
67-63-0	ISOPROPYL ALCOHOL (MFG-STRONG ACID PROCE	232	431
75-45-6	CHLORODIFLUOROMETHANE [HCFC-22]	196	412
8008-20-6	KEROSENE	305	395
N982	ZINC COMPOUNDS	167	363
7647-01-0	HYDROCHLORIC ACID	209	361
7440-50-8	COPPER	212	329
7664-41-7	AMMONIA	173	225
75-09-2	DICHLOROMETHANE	111	184
			20,782

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NJ Community Right to Know Survey and Release & Pollution Prevention Report Public Data Fact Sheet for 2010



A program designed to collect information about the storage, release and transfer of hazardous substances in the community and to provide citizens and government agencies with access to that information

April 2013

Chris Christie, Governor
 Kim Guadagno, Lt. Governor
 Bob Martin, Commissioner