

5.10.2 Populations

5.10.2.1 Onsite

Population data are required to calculate the societal risk.

Onsite population data is provided in *Section 2.22.2*. During normal workdays, there are approximately 150 personnel onsite. In addition to Solvay personnel, there may be up to 50 contractors working on the Oldbury site, predominantly on days, although a typical average will be around 20 at any one time.

5.10.2.2 Offsite

The offsite population data provided has been extracted from the HSE National Population Database. Population numbers are given for different sectors surrounding the Oldbury facility. The area covered by each sector is given in *Figure 5.6*.

The population numbers for each sector are given in Table 5.12 to Table 5.15.

The Rose Lodge Hospital is situated in sector 4 and has a population number of 18.



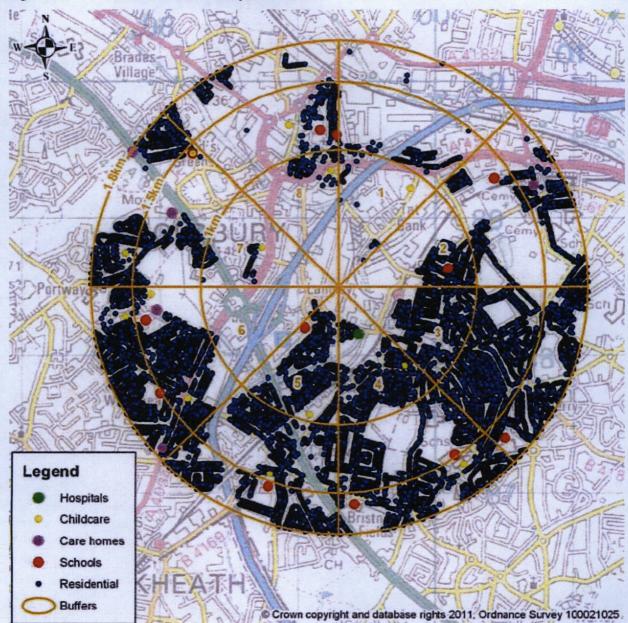
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Figure 5.6 Location of Offsite Populations



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Table 5.12 **Residential Population Data**

| Sector | Up to 1 km | | | Up to 1.5 km | | 网络物质粉质的现在分 | Up to 1.8 km | NEW TOWNS CONTROL | SERVICE SERVICES |
|--------|------------|------|------|--------------|------|-------------------|--------------|-------------------|------------------|
| | Night | DPTT | DNTT | Night | DPTT | DNTT | Night | DPTT | DNTT |
| 1 | 116 | 53 | 72 | 624 | 276 | 412 | 634 | 281 | 418 |
| 2 | 1360 | 600 | 863 | 2224 | 1003 | 1415 | 3726 | 1760 | 2417 |
| 3 | 2324 | 1057 | 1409 | 5291 | 2404 | 3211 | 7320 | 3328 | 4491 |
| 4 | 2237 | 966 | 1274 | 4161 | 1776 | 2424 | 5977 | 2590 | 3494 |
| 5 | 2002 | 817 | 1133 | 4109 | 1674 | 2344 | 5883 | 2442 | 3393 |
| 6 | 56 | 27 | 34 | 2736 | 1224 | 1611 | 5462 | 2427 | 3150 |
| 7 | 205 | 94 | 120 | 917 | 382 | 515 | 2940 | 1227 | 1708 |
| 8 | 521 | 282 | 316 | 1339 | 657 | 817 | 1833 | 894 | 1115 |
| TOTAL | 8821 | 3896 | 5221 | 21402 | 9397 | 12749 | 33775 | 14950 | 20185 |

- [1] Night maximum residential population (usual residential population). This can be used as night time, worst case scenario population estimate.
 [2] Day term-time (DPTT) daytime term-time population (total weekday term-time population of address-points, i.e. all children of school age are at school, and all workers are at work).
 [3] Day non term (DNTT) daytime non term-time population (total daytime non term-time population of address-points, i.e. school children are at home).
- [4] The population numbers given are cumulative, e.g. the numbers for up to 1.5 km include the numbers for up to 1 km.

Table 5.13 School Population Data

| Sector | Up to 1 km | MOSET RECOVERS SERVICE | Up to 1.5 km | | Up to 1.8 km | |
|--------|-------------------------|------------------------|--|---------|--|------------|
| | School | Pop. | School | Pop. | School | Pop. |
| 2 | Rood End Primary School | 305 | George Betts Primary School | 314 | George Betts Primary School | 314 |
| | | | Rood End Primary School | 305 | Bristnall Hall Technology College | 940 |
| | | | | | Rood End Primary School | 305 |
| 1 | | | Moat Farm Junior School | 440 | Oldbury College of Sport | 1686 |
| | | | Moat Farm Infant School | 266 | Moat Farm Junior School | 440 |
| | | | | | Moat Farm Infant School | 266 |
| ; | Langley Primary School | 338 | Langley Primary School | 338 | Causeway Green Primary School | 393 |
| | | | | | Langley Primary School | 338 |
| i | | | St James CofE Primary School | 370 | Whiteheath Pupil Referral Unit | 3 |
| | | | | | St James CofE Primary School | 370 |
| ' | | | Rounds Green Primary School | 276 | Rounds Green Primary School | 276 |
| 3 | | | Christ Church CofE (VA) Primary School | 197 | Christ Church CofE (VA) Primary School | 197 |
| | | | St Francis Xavier Catholic School | 216 | St Francis Xavier Catholic School | 216 |
| | | TOTAL 643 | TO | AL 2722 | | TOTAL 5744 |

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Table 5.14 Care Home Population Data

| Sector | Up to 1 km | THE STATE OF THE S | Up to 1.5 km | STATES OF THE SERVICE | Up to 1.8 km | or took and readily a three |
|--------|---------------------------------|--|--|-----------------------|----------------------------|-----------------------------|
| | Care home | Pop. | Care home | Pop. | Care home | Pop. |
| 2 | | | | | Karam Court Care Home | 44 |
| 6 | | | Birchfield Resource Centre | 39 | George Leonard Rest Home | 23 |
| | | | | | Birchfield Resource Centre | 39 |
| 7 | | | Newbury Manor Nursing Home | 47 | The Gables Nursing Home | 51 |
| | | | | | Newbury Manor Nursing Home | 47 |
| | | TOTAL 0 | | TOTAL 86 | | TOTAL 204 |
| Notes | The number of care homes and th | ne number of beds within ear | ch sector has been provided for the spec | ified area | | |

Table 5.15 Day Care Centre Population Data

| Sector | Up to 1 km | Control (September 1997) | Up to 1.5 km | A SECURIO | Up to 1.8 km | elante acceptance |
|--------|---|--------------------------|--|-----------|--|-------------------|
| | Day care centre | Pop. | Day care centre | Pop. | Day care centre | Pop. |
| 1 | Sandwell Training & Development Centre Day Nursery | 49 | Little Learners Day Nursery | 52 | Little Learners Day Nursery | 52 |
| | | | Sandwell Training & Development Centre Day Nursery | 49 | Sandwell Training & Development Centre Day Nursery | 49 |
| 4 | Bloxcidge House Day Nursery | 61 | Bloxcidge House Day Nursery | 61 | Lavender Farm | 106 |
| | | | | | Bloxcidge House Day Nursery | 61 |
| 5 | The Apple Tree Holiday Club | 30 | Causeway Green Out of Hours Club | 24 | Causeway Green Out of Hours Club | 24 |
| | | | The Apple Tree Holiday Club | 30 | The Apple Tree Holiday Club | 30 |
| 5 | | | Lion Farm Play centre | 32 | Lion Cubs Den Playgroup | 39 |
| | | | The Oyster Club, Oldbury | 40 | Lion Farm Play centre | 32 |
| | | | | | The Oyster Club, Oldbury | 40 |
| 7 | Cheeky as Chimps Ltd | 50 | Rounds Green Play scheme Out of School Club | 30 | Wallace Close Play centre | 16 |
| | | | Cheeky as Chimps Ltd | 50 | Rounds Green Play scheme Out of School Club | 30 |
| | | | | | Cheeky as Chimps Ltd | 50 |
| 3 | Stepping Stones Playgroup | 44 | Workplace Nursery | 50 | Workplace Nursery | 50 |
| | | | Stepping Stones Playgroup | 44 | Stepping Stones Playgroup | 44 |
| | TO | TAL 234 | TOTA | L 462 | | AL 623 |

Notes The number of childcare organisations and the number of children within each sector has been provided for the specified area

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13 EMERGENCY RESPONSE

13.1 Introduction

The Oldbury Site Emergency Procedure details procedures set up to deal with all site emergencies.

The following have been consulted in the preparation of the onsite emergency plan: Solvay employees, HSE, EA, health authority, local authority and emergency services. There are no downstream drinking water abstractors within 1km of the site.

There are no mutual aid arrangements.

The types of incident possible are:

| • | "Casualty" | caused by the sudden illness or injury of one or more persons other |
|---|-------------|---|
| | | than in the events listed below |
| • | "Spillage" | caused by release of hazardous material. |
| • | "Fire" | either fire or explosion with or without casualties; |
| • | "Toxic Gas" | caused by a release of toxic gas which may require some degree of |
| | | evacuation |

Specific sections of the emergency procedure include:

- Section 1 gives details of the General Site Emergency Procedure. This section describes general procedures brought into action when a site emergency incident occurs including measures such as:
 - o raising alarms
 - o roles of key personnel in emergency incidents
 - o communications
 - o external emergency services
 - o site facilities

Depending on the nature of the emergency, some or all of the steps in the procedure will be invoked.

- Section 2 details the Toxic Gas Emergency Procedure. This procedure is designed for specific incidents involving a release of toxic gas e.g. a phosphine emission from the phosphine plant.
- Section 3 gives details for dealing with other specific emergencies including:
 - o Phosphine Plant Fire Protection
 - o Terrorist Contingency Plan
 - o Bomb Threat
 - Microbiological Hazard
 - Loss of Containment Event
 - o Oxygen Release

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- Section 4 describes the offsite emergency procedure. The objectives of this emergency procedure are to make maximum use of the combined resources of the Site, and the outside services to:
 - o effect the safe evacuation of personnel directly involved with the emergency.
 - o effect the rescue and treatment of casualties.
 - o safeguard other people both inside and outside the Site.
 - o initially contain and then bring the incident under control.
 - o provide for the needs of relatives of any casualties.
 - o make available information for the news media.
 - o secure the safe rehabilitation of affected areas.
 - preserve relevant records and equipment for identifying the cause and circumstances of the incident.

In addition, specific fire fighting procedures have been developed for different materials, as follows:

- phosphine;
- yellow phosphorus;
- highly water-reactive materials (e.g. phosphorus oxychloride and phosphorus trichloride);
- flammable liquids;
- oxygen;
- high tension electrical equipment; and
- heat transfer fluid systems.