Proceedings of the Institution of Civil Engineers
Waste and Resource Management 161
February 2008 Issue WR1
Pages 13–14
doi: 10.1680/warm.2007.161.1.13
Paper 700014
Keywords:
codes of practice & standards

ice
Institution of Civil Engineers

Briefing: Site waste-management plans

Victoria Hill, *Taylor Woodrow Construction, UK*

Site waste-management plans (SWMPs) were originally introduced by the UK Department for Trade and Industry (DTI) as a voluntary code of practice in 2004. An SWMP is a tool that will help construction companies improve resource efficiency, meet regulatory controls and reduce the rising costs of waste. While larger construction companies have embraced the concept, or are working with some form of SWMP as part of their environmental management system (EMS), anecdotal evidence suggests that the uptake of SWMPs within smaller companies has not been significant owing to its voluntary nature.[1,2]

The statistics clearly demonstrate that this waste stream requires further control and consideration. Construction and demolition waste account for about one-fifth of all reported fly-tipping incidents and a third of the more serious incidents dealt with by the Environment Agency.[1] It is therefore not surprising that the proposal to regulate SWMPs under powers provided through section 54 of the Clean Neighbourhoods and Environment Act 2005 is underway. The proposals only make SWMP a legal requirement for construction projects in England, with a separate consultation proposed for Wales later in 2007.[1]

Whether SWMPs require regulation is an area of contention, since resource efficiency and waste minimisation are key issues cited in *Planning Policy Statement 10* and the *Code for Sustainable Homes* (CSH).[3,4] A common argument to support regulation is that the client and principal contractor are equally responsible for compliance within the regulations, thus the client cannot discharge his or her responsibilities to the principal contractor. This will provide a level playing field in the industry and will encourage an engaged and committed client. Results from the recent consultation on the introduction of mandatory SWMPs have indicated that 75% (151 responses) support the introduction of statutory SWMPs and 58% of the responses from the industry are in favour.[1]

A criticism of the regulations is that they concentrate on the construction stage and, while companies will be encouraged at the design conception and planning stage to consider the waste that the project is expected to produce, many projects are now built only with limited opportunities to engage the client in waste minimisation through design changes. The majority of a building's environmental impact is determined at the design stage and up to a third of waste can be designed out. It is not clear why the design is not considered in significant detail within the regulations, as this strikes at the heart of the waste hierarchy—minimisation. Omitting any responsibility for the architects and designers to consider waste minimisation (beyond that of client influence) from the statutory requirements is a lost opportunity. This opportunity is further compounded by the recent revision of the Construction (Design Management) (CDM) Regulations 2007 that could have provided complementary and joined up pieces of statute; it is proposed however, that there be close alignment with the definitions and responsibilities set out under CDM.

It is intended that SWMPs will simplify the administrative burden on the construction sector by providing a mechanism to ensure compliance, where one plan will hold all the information needed to comply with the duty of care, hazardous waste, waste carrier and broker controls. Concern has been expressed regarding the burden on construction companies who have to produce a SWMP and will incur additional costs; these have been addressed in the partial regulatory impact assessment. However, the Building Research Establishment has provided the main data that have supplemented the proposed threshold for requiring a SWMP.[1,2] This research demonstrates that on a project cost of £200 000, producing a SWMP will be neutral in terms of costs and benefit (£750 each). The minimum qualifying value to produce a SWMP has therefore been set at £250 000, with higher value projects requiring a SWMP with a greater level of detail, as the benefits have been shown to outweigh the costs.[1] Results from the recent consultation have shown that 30% of the respondents are in favour of this threshold, however, 10% thought this threshold was too low and 22% thought it was too high, since this excludes smaller builders thought to be the primary source of fly tipping.[1]

It will generally be the principal contractor who has the responsibility to prepare and implement the SWMP (although a certain level of detail should have been completed at design stage). The requirements to produce a SWMP and ensure every worker carrying out construction work is provided with appropriate information will require additional training and, potentially, down time. Additional arrangements to keep the workers engaged and cooperating effectively may require some form of enhanced contractual arrangements providing incentives or penalties. It is the awareness and buy-in that will provide the main hurdles to an effective SWMP and it is likely that basic waste awareness will become a required core competency for all sub- and principal contractors. These needs could be partly addressed by way of in-house training, or the Construction Waste Awareness Certificate recently launched by the Chartered Institution of Wastes Management (CIWM).[5]

The draft regulations provide information on the level of detail required in a SWMP and include

(*a*) identification of the types of waste and making a note of any changes in design and material specification that will minimise waste
(*b*) volume estimates for each waste stream
(*c*) identification of options, following the waste hierarchy for all wastes produced on a project
(*d*) information required under the duty of care
(*e*) quantities of waste produced.[1]

Lessons learned, cost savings and waste volumes recorded as part of the SWMP would provide industry with key information to improve resource efficiency and minimise wastage. Currently, there is no proposed mechanism, data capture or dissemination and whether this occurs in practice will remain to be seen. However, it is likely that clients will latch on to the benefits of a SWMP and may require some form of continuous improvement in construction practices, resource efficiency and waste volumes/costs.

The Environment Agency and Local Authorities will be the enforcing officers and this consultation provides detail on the offences and penalties proposed. The main offences include

(*a*) failure to make or keep a SWMP (or one that does not meet the minimum criteria)
(*b*) failure to produce a SWMP upon request
(*c*) false statements
(*d*) failure to assist an enforcing officer
(*e*) failure to comply, or implement a SWMP
(*f*) forging a SWMP.[1]

Penalties range from fixed penalty notices of £300 in failing to produce a SWMP to an enforcing officer, with additional proportionate fines and/or imprisonment of up to £5000, or two years for other offences.[1]

Organisations such as WRAP and Envirowise have been providing training on SWMPs and the message is clear—SWMPs should be seen as an opportunity and not as an additional regulatory burden. Making SWMPs a regulatory requirement will tighten controls on waste movements and minimise fly tipping (along with the proposed revision of the duty of care[6]), while providing a level playing field within the industry, reducing waste generation and increasing reuse and recycling opportunities during construction. The industry has known for some time that effective waste management will save money and increase resource efficiency. The recent consultation has confirmed that 85% of the consultation respondents agree.[1] A SWMP will provide a mechanism to encourage waste segregation and suitable storage, which will not only allow materials to be recovered, but will result in a more ordered, safer working environment and provide valuable information to improve resource efficiency, hopefully moving it towards the top of the waste hierarchy in the future.

REFERENCES

1. *Consultation on Site Waste Management Plans for the Construction Industry*. See Defra, http://www.defra.gov.uk/corporate/consult/construction-sitewaste/index.htm for further details.
2. *Site Waste—Its Criminal: A Simple Guide to the Site Waste Management Plans*. See Netregs, http://www.netregs.gov.uk/commondata/acrobat/swmpf_1697918.pdf for further details.
3. *Planning Policy Statement 10: Planning for Sustainable Waste Management*. See Department of Communities and Local Environment, http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/mineralsandwaste/wastemanagement/planningpolicystatement/ for further details.
4. *The Code for Sustainable Homes*. See Department of Communities and Local Environment, http://www.planningportal.gov.uk/england/professionals/en/1115314116927.html for further details.
5. *The Waste Awareness Certificate + Construction*. See Chartered Institution of Wastes Management, http://www.ciwm.co.uk/pm/389 for further details.
6. *Consultation on the Controls on the Handling, Transfer and Transport of Waste*. See Defra, http://www.defra.gov.uk/corporate/consult/waste%2Dcontrols/ for further details.