



## Keep Wales Tidy's Updated Policy Paper on Chewing Gum litter.

Keep Wales Tidy overall deems prevention to be the most sustainable means of addressing the issue of chewing gum litter and staining. We see prevention as involving campaigns, enforcement and design considerations and also recognise the benefit of responsive cleansing. The various roles responsible for ensuring the necessary change in behaviour involve local authorities, Keep Wales Tidy, the Welsh Assembly Government, the chewing gum industry and the Chewing Gum Action Group. Keep Wales Tidy should like to see that each party assists in enhancing the local environments of Wales.

### Introduction

This paper follows a Keep Wales Tidy's policy paper on chewing gum from 2005. Keep Wales Tidy has deemed it appropriate to update the paper in order to report on progress from our previous recommendations and acknowledge product developments, good practice elsewhere and implementation of the Clean Neighbourhoods and Environment Act 2005. This paper sets out a series of updated recommendations based around prevention, monitoring and supporting local authorities in Wales.

### Background

The 2005 paper sets out the reasons which make chewing gum litter and staining an issue. These can be summarised as follows:

- -Chewing gum staining on streets is a concern to the general public of Wales . Keep Wales Tidy, 2005. Local Environmental Quality Public Consultation. Caerdydd: Keep Wales Tidy.
- -There is a significant financial cost of removing gum from public land; £100-150m. (Defra, 2004. Clean Neighbourhoods Consultation Document. London: Department for Environment, Food, and Rural Affairs)
- -Chewing gum removal is arduous, disruptive and costly and can damage floor surfaces (Postnote, 2003. Chewing Gum Litter. London: Parliamentary Office of Science and Technology. Number 201, September 2003.)
  - Enforcement of littering offences relating to chewing gum is difficult. (Robinson B, 2005. Pers. Comm. Ben Robinson, Environmental Projects Officer, Maidstone Borough Council, 9 December 2005)
- -Education on packaging has not been successful (there appears to be no evidence linking the introduction of anti-littering messages on chewing gum packaging in 1993 with a reduction in chewing gum/chewing gum packaging littering).

## Current situation - Enforcement and Cleansing

The Clean Neighbourhoods and Environment Act 2005 explicitly details loose chewing gum as litter, thereby clarifying that the act of dropping chewing gum a littering offence, liable to a fixed penalty notice. The Code of Practice on Litter and Refuse 2007 further outlines that chewing gum staining on streets is not to be considered litter. As such, local authorities in Wales are not obliged to remove chewing gum stains from their streets. Many of them, however, do so and chewing gum staining has been cited as one of the most common problems facing local authorities in Wales (KWT, Designing for a Clean, Safe and Tidy Environment).

Whilst Keep Wales Tidy recognises that a number of local authorities do not actively remove chewing gum stains, we understand that at least half (11) of the local authorities in Wales have at some stage removed chewing gum staining or continue to do so, be it periodically or routinely (response to KWT email March 2010). Some local authorities have chosen to remove gum staining only at certain, town/city locations and some of those local authorities that have removed gum as an exceptional service or have opted to employ contractors on an ad-hoc basis. A number of local authorities have invested in removal equipment, the acquisition of which has in part been made more feasible due to Tidy Towns funding.

Keep Wales Tidy is aware of one scheme whereby local authorities have agreed to share gum removal equipment as part of a cross boundary Tidy Towns project. Removal equipment may include low pressure steam washers or high pressured jet washers. The high pressure washers have also been used to remove graffiti and fly-posting; making them more economically viable. However, it has been reported that high pressure washers can damage some surfaces as well as the mortar between paving joints (response to KWT query to local authorities, March 2010). Low pressure washing, meanwhile, is more time consuming on the user. Another consideration when using steam/jet washers is the impact on street users, which may oblige unsociable working hours. An alternative method of removal is scraping; although this only works on relatively recently dropped gum and is limited to paving materials with particularly smooth finishes.

Perhaps understandably there continues to be few recorded cases of Fixed Penalty Notices being issued for chewing gum littering offences. The act of irresponsibly discarding gum can go unnoticed due to the size of the item or when done intentionally discreetly. Many local authorities have chosen to increase the amount of staff/officers who can issue FPNs in relation to littering offences. In some of Wales' local authorities, for instance, Police Community Support Officers have been given powers to issue FPNs in relation to littering offences. There has been discussion, in England, of allowing bin men to issue FPNs also. <http://www.thisislondon.co.uk/news/article-1853800-50-fine-for-dropping-gum.doc>. More enforcement staff increases the likelihood of more FPNs being issued and increases the likelihood of FPNs being issued for dropping chewing gum. The role of enforcement staff can also be seen as preventative, particularly when their presence is highly visible and their role is publicised locally.

A significant development since Keep Wales Tidy's 2005 policy paper has been the emergence of a biodegradable chewing gum for sale in the UK. At the time of writing, however, this particular gum is only available at Waitrose and cost significantly more than conventional gum. For Keep Wales Tidy this remains a welcome development as it would seem to follow that there will be less chewing gum staining on our streets in the future. We would resist complacency, however, knowing that there are

many manufacturers of gum, promoting differing properties and as such we would envision it taking a significant amount of time for all gum manufacturers to develop biodegradable products, if they do at all. Indeed, Wrigley's continues to be the market leader and continues to resist pressure for their products to be made biodegradable. Meanwhile a biodegradable gum that continues to be dropped or spat out would still constitute littering. A more desirable development from, Keep Wales Tidy's perspective, would be for gum to be responsibly disposed of in the first instance.

In areas of high public footfall, where gum staining is perceived to be a problem, the choice of flooring materials procured can have an important role. Consideration should be given to this as and when public realm improvement works are being planned. Initially the colour and pattern of surfaces can emphasise chewing gum and other staining, or to some extent mask it. Dark coloured paviers or a mixed-colour regime can, for instance, help minimise the visual impact of stains. This was regarded as a design issue by Welsh local authorities in a 2008 survey (KWT, Designing for a Clean, Safe and Tidy Environment).

Natural stone also has an absorption rate, which varies significantly and dictates staining potential (Michael Head, CEP LT. Heads of the Valleys Public Realm Design Seminar, Blaenavon, 09/06/2009). Some materials, meanwhile, will be less resilient than others to particular cleaning techniques. For instance high-power jet washing has been said to damage sandstone and limestone and also tarmac and the joints between paviers (KWT, Designing for a Clean, Safe and Tidy Environment), although respondents were not questioning the usage of such materials, more that surrounding land-uses and contextual details should be taken into account where possible. Keep Wales Tidy acknowledges that decisions as to the most appropriate method of tackling chewing gum staining can be difficult; staff time is a clear consideration, but so must be potential damage to paviers and impact of chemical use. Many chemicals are, however, marketed for their environmental credentials.

A protective coating can be applied to a variety of flooring surfaces decreasing future penetrability and thereby making chewing gum, and indeed other pollutants, less prone to sticking to the surface (see the *local responses* case study, below).

Lord Rogan raised a question in the House of Lords as to whether the Government had considered a levy or tax on chewing gum with the revenue raised distributed to 'local authorities to help them to fund the clear-up of the mess'. Lord Rooker responded on behalf of the Government that the tax had been considered yet 'dismissed on the basis that people who are anti-social enough to dispose of gum this way will have their conscience eased on the basis that they have paid for it to be cleaned up. We want them to change their behaviour in the first place. We do not think that a tax is the right way to do it'. (31/10/2006, Address to House of Lords, <http://www.publications.parliament.uk/pa/ld199697/ldhansrd/pdvn/lds06/text/61031-0002.htm>)

As such alternative means to addressing the chewing gum litter/staining issue need to be sought.

#### Existing approaches; monitoring, partnerships, campaigns, prevention and responses

Actions intending to reduce the chewing gum litter/staining issue are highlighted in this section of the paper with the intention of learning from practices and successes elsewhere.

## Developments

Research carried out amongst chewing gum consumers in England, can potentially provide useful information for future campaigns. The research amongst a sample that regularly or occasionally dropped chewing gum, on behalf of the Chewing Gum Action Group, found that whilst most segments understood dropping chewing gum to be wrong, generally dropping chewing gum was not seen as a big issue. Three of the four segments, meanwhile, acknowledged gum on paviers as being unsightly and problematic, although for no group was this the biggest problem associated with gum. Gum in hair, gum on clothing and touching gum were all talked of with strong feelings of being 'appalled', 'revolted', 'annoyed' and 'guttled'. Drawing parallels between such feeling and the act of dropping gum may be an appropriate avenue for campaigns.

As well as highlighting the impacts of such litter, there appears to be a need to highlight the point that dropping chewing gum is an offence liable to a fixed penalty notice; 71% of the sample (who frequently or occasionally drop litter) were of the opinion that a £50 fine would discourage gum dropping (Gum Droppers Segmentation Study Stage 3, CGAG). Analysis of the discussions categorised potential areas where responsible chewing gum disposal could be developed: Compulsion/fining; product modification; packaging modification; develop disposal instructions; bin design; campaign messages.

### **Monitoring**

In their Local Environmental Quality Survey of England (LEQSE), Keep Britain Tidy records the presence of 'flattened gum' as staining. Survey results show chewing gum to represent the biggest form of staining. It is also recognised that having removed gum from a street, there often remains an oily deposit 'as unsightly as the gum itself' (ENCAMS Policy Statement on Chewing Gum).

In their Borough Cleanliness Surveys, Tidy Northern Ireland considers chewing gum and the corresponding stains as a litter type. Having established that chewing gum litter is one of the two most prevalent litter types on streets, Tidy Northern Ireland carried out a campaign against chewing gum littering in 2005. (<http://www.tidynorthernireland.org/programmes/tidy-surveying/borough-cleanliness-survey-information/index.php>)

The Welsh equivalent survey, the Local Environmental Audit and Management System (LEAMS), does not record chewing gum staining.

### **Campaigns and partnerships**

The following case studies show the potential benefit of partnerships and campaigns taken locally, nationally and internationally.

### *Box 1; Partnership work*

The Gum Action Group is a partnership between DEFRA, Keep Britain Tidy (formally ENCAMS), CIWM, the LGA, Keep Scotland Beautiful, the Scottish Government, the Welsh Assembly Government, the Food and Drink Federation and representatives from chewing gum manufacturers. The group receives £700 000 per annum from the chewing gum industry and seeks to alleviate the issue of chewing gum on streets primarily by focussing on changing the behaviour of litterers and supporting the development of degradable/non-stick varieties of gum. Action taken includes public attitude research and periodical campaigns within local authority areas of England. Such campaigns necessitate commitment and genuine involvement of Councils. Following a 2009 campaign led by the Chewing Gum Action Group, it was reported that participating local authorities saw an average reduction of chewing gum litter of 48% in the survey areas (CGAG Press Release - Results 2009).

The 2010 Chewing Gum Action Group campaign will for the first time actively involve Welsh local authorities, with Cardiff and Carmarthenshire having successfully applied to take part. In addition the campaign is to make its corresponding posters freely available to all local authorities. This potentially marks a significant development as previous campaigns appear to have demonstrated notable reductions in chewing gum litter.

In the Republic of Ireland, a Gum Litter Taskforce has been established and is charged with developing and implementing an Action Programme to tackle gum litter a sustainable way – by changing behaviour. The Taskforce is a joint initiative and follows a negotiated agreement between the Department of the Environment, Heritage and Local Government and the chewing gum industry. The agreement involved securing a 7 million euro contribution from Wrigley and from this point of view Keep Wales Tidy understands the agreement to be unique.

<http://www.environ.ie/en/Environment/Waste/LitterPollution/News/MainBody,16142,en.htm>. The agreement came after the Irish Government proposed a 10% tax on chewing gum intended to generate revenue to remove gum staining. The proposed tax led the industry to lobby for an alternative financial agreement.

<http://www.confectionerynews.com/Formulation/Gum-tax-prevented-as-industry-steps-in>

Adelaide City Council has attempted to negotiate an agreement with Wrigley's to take responsibility for removing chewing gum from the city's streets or implementing an education programme to lessen the problem. The Council has stated its intentions to implement a by-law, banning the sale of chewing gum in the city if it cannot forge agreement with chewing gum manufacturers over contributing to removal or education.

<http://www.abc.net.au/news/stories/2009/09/29/2699676.htm>

*Box 2; local responses*

Sunderland Council have also sought to provide the public with a solution to disposing of gum in the way of a specialised wallet. <http://www.sunderlandecho.com/news/Hit-squad-to-slap-gumspitters.5706488.jp>

-As part of their campaign Bedford Borough Council distributed 'gum raps' (small booklets of recycled paper in which gum can be wrapped until it can be binned).

[http://www.bedford.gov.uk/community\\_and\\_living/community\\_services/pride\\_in\\_bedford/chewing\\_gum\\_campaign.aspx](http://www.bedford.gov.uk/community_and_living/community_services/pride_in_bedford/chewing_gum_campaign.aspx)

- Croydon Improvement District, in September 2008, launched a public campaign to discourage gum dropping. The district had spent thousands of pounds removing millions of pieces from streets. The campaign included visuals and rewards and coincided with increased enforcement on the issue locally.

[http://www.bbc.co.uk/london/content/articles/2008/09/10/croydon\\_gumbuster\\_campaign\\_feature.shtml](http://www.bbc.co.uk/london/content/articles/2008/09/10/croydon_gumbuster_campaign_feature.shtml)

Westminster City Council carried out a trial of 'Magic cote', a protective coating for paving stones. The coating is designed to restrict the future penetrability of stone, making chewing gum (amongst other substances) less likely to stick to the surface. Deeming the trial a success, Westminster CC then set about coating an extended length of Coventry Street. In order to generate the biggest benefit to the street scene, the pavement was thoroughly cleansed before being coated and coordinated as to have minimum disruption on pedestrians and adjacent businesses. The life expectancy of the coat is reported to be five years and ongoing maintenance costs have been reduced with cleansing of stains requiring less time.

<http://www.communityclean.co.uk/cms/site/docs/Magic%20Cote%20-%20CIWM%20article.pdf>

Swansea City Council has installed street bins in strategic locations, specially designed to encourage responsible disposal of chewing gum and cigarettes. The Council has also distributed 7000 'Stubbies' and promoted their use as a means to discard chewing gum

(<http://www.swansea.gov.uk/index.cfm?articleid=24932>).

At the time of writing Cardiff Council is trialling 'Smartbins' in city centre areas. It is hoped that the bins (designed specifically for gum litter and cigarette butts) will help to maintain the quality of recent public realm improvements and in particular new paving

(<http://www.cardiff.gov.uk/content.asp?id=9838&d1=0>).

Review of the 2005 paper recommendations:

2005 recommendation	Progress/changes	Future action
Encourage chewing gum manufacturers and academic institutions to research biodegradable gum products.	A biodegradable gum (Chicza) has since been developed and is currently on sale in the UK.  The CGAG continues to support the development of biodegradable/non-stick products.	Monitor and encourage such product developments of other manufacturers
Support those local authorities that are considering a ban on the sale of gum, and help to monitor the situation in the affected area to assess effectiveness	No local authorities have since made movement in the way of localised bans on the sale of chewing gum. This possibly reflects a lack of public support for such a ban.	Keep Wales Tidy acknowledges that an outright ban of chewing gum may be disproportionate in its overall effect on society. For example an outright ban would needlessly affect those that currently dispose of gum responsibly and prohibit the medicinal/health value of some forms of gum. Keep Wales Tidy will achieve most by concentrating efforts on advocating behavioural change and promoting other means to reduce the impact of gum litter.
An economic instrument (taxation) should be used to help alleviate some of the external costs (littering) faced by local authorities in dealing with chewing gum residue. A minimum 10% levy (approximately 3-5p per pack) is recommended.	A tax on chewing gum has not emerged. The issue has been raised in the House of Lords; the outgoing Labour Government has considered such a tax but dismissed it. This remains an issue for the Treasury.	Consider other means of reducing the issue of chewing gum litter/staining. Behavioural change appears to be the favoured approach of Government and the CGAG and is an underlying ethos of Keep Wales Tidy. As such Keep Wales Tidy will pursue means to align ourselves with the work of these potential partners.
Consider a negotiated agreement, but only as a less	The Republic of Ireland has successfully negotiated funding	Keep Wales Tidy will pursue an active role in the Chewing Gum

desirable alternative to taxation.	obligations from manufacturers for chewing gum removal/education.  The £700 000 contribution from the industry to the CGAG will potentially benefit Welsh areas from 2010.	Action Group as a means of ensuring manufacturers contribute towards tackling the issue.
-Manufacturers should, as a minimum demonstration of their commitment to reducing gum litter, substantially increase the size of the anti-litter message on chewing gum packaging.  -Keep Wales Tidy should consider targeting chewing gum litter in a specific campaign	-The size of the anti-littering message on chewing gum wrappers has not increased.  -Keep Wales Tidy have not targeted chewing gum litter in a campaign.	- Consider lobbying gum manufacturers to increase the size of their anti-littering messages.  - Considering our shared interests and support for a behavioural change approach, it may be appropriate to align ourselves with the campaigns of the CGAG and assist in their implementation in Wales.
Keep up to date with best practice elsewhere, including internationally, in order to assess other options for tackling chewing gum litter	A review of approaches to tackling the issue has been carried out as part of this paper and the findings will help determine future policy.	Continue to keep up to date with good practice elsewhere and if necessary disseminate findings.

Progress in any single recommendation, should not be seen as a solution to the issue of chewing gum litter and staining. For instance a biodegradable gum may lessen the issue of staining on streets but will not necessarily reduce the amount of littering in the first instance. As such the solution must involve a combined approach which utilises enforcement and education/campaigns.

#### Updated recommendations

*Keep Wales Tidy's recommendations primarily focus on prevention as we consider discouraging people from dropping gum in the first instance as the most sustainable means of addressing the issue. Keep Wales Tidy deems prevention in this instance to comprise campaigns, enforcement and design considerations and also recognises the benefit of responsive cleansing. Keep Wales Tidy also recognises the potential role for us in monitoring the prevalence of chewing gums staining and supporting local authorities.*

**Campaigns** – Keep Wales Tidy should be supportive of anti chewing gum litter campaigns. Evidence shows that campaigns can be successful in reducing such litter. Keep Wales Tidy recognises the potential of unnecessarily duplicating an anti chewing gum litter campaign, now that the CGAG campaign is to be active in Wales. We also see the potential benefit of the CGAG funding campaign

material and the significance of a national campaign. There is a potential role for Keep Wales Tidy in ensuring the campaign message is spread across Wales (for example beyond the limited number of local authorities that are to be formal partners in the 2010 CGAG campaign).

**Campaigns** - Gum manufacturers could be approached in a bid to increase the size of their anti-littering messages on packaging and advertisements.

**Enforcement**- the role of enforcement is necessary in the first instance to punish offenders and also as a means to discourage such action in the future. Publicity should be made of enforcement action for offences relating to gum dropping by the relevant local authority and possibly Keep Wales Tidy. This will help demonstrate to those that are unaware of the legal aspect that such action constitutes an offence. It will also help demonstrate to those that are aware of the law that it is indeed enforced and that there is a chance of being fined. When there is scope to do so, the number of staff able to issue FPNs should be increased and chewing gum littering offences should be targeted and publicised. Keep Wales Tidy should promote the role of active enforcement.

**Urban design issues**- Particularly in public realm improvements, consideration should be given to flooring materials in a bid to lessen the impact of gum staining; in particular weather or not the area in question is susceptible to chewing gum staining, and incidentally, fast food and other oily deposits. Cleansing staff should provide input and consideration should be given to the future maintenance needs of the area and surfaces. For more information see Designing for a Clean, Safe and Tidy Environment, A good Practice Guide, available from [www.keepwalestidy.org](http://www.keepwalestidy.org). Consideration should also be given to treating flooring materials in certain areas with a protective coating.

**Product design considerations** –Local authorities should consider the use of novelty products to target certain segments of society in certain areas. Novelty bins, for instance, have been designed specifically for chewing gum in attempt to attract attention; ‘Gum targets’ claim to act as reminders for responsible disposal and are themselves an alternative means of disposal, and specialised wallets and gum-wrappers have been distributed in some areas as a means for people to dispose of gum as and when required.

**Be responsive** – Those local authorities intent on removing gum should do so at regular intervals, in target areas, as it becomes progressively more difficult to remove gum from surfaces over a matter of days. Meanwhile it is reasonable to presume that like any other litter type, an existing presence makes passers by more susceptible to adding to it. Local authorities should make informed decisions as to methods of staining removal; considering staff time, energy use and the nature of chemicals. Local authorities should also be aware of the potential to work with other local authorities as a means to share chewing gum removal equipment, thereby making it more feasible.

**Surveys** - Staining can be surveyed and the success of anti gum litter campaigns can be monitored. These may be carried out by Keep Wales Tidy or local authorities in agreed areas before, during and after an anti-gum litter campaign is carried out (depending on available resources).

**Surveys** - KWT should consider surveying the presence of chewing gum staining as part of their LEAMS surveys. Currently only loose chewing gum is recorded as litter in line with the Code of Practice on Litter and Refuse and Associated Guidance 2007 but chewing gum staining could be

considered an Adverse Environmental Quality Indicator (AEQI). The severity of the presence may also be monitored.

**Reviews**-Keep Wales Tidy should periodically review good practice elsewhere and if it deems appropriate, act on findings. It would be beneficial to KWT to continue to keep up to date with approaches to dealing with the issue in attempt to learn from successes and failures elsewhere, for instance the Chewing Gum Action group is one such group.

**Support** – Keep Wales Tidy should support a negotiated agreement between the Welsh Assembly Government and the industry as a means of generating money to contribute towards local authority cleansing and educational campaigns. A relevant platform for dialogue may be within the Chewing Gum Action Group, within which representatives from the chewing gum manufacturing industry and the Welsh Assembly Government are partners. Keep Wales Tidy will also seek direct involvement within the group.