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SIR CHARLES POWELL

cc Sir Robin Butler

Time Review
Time Review
A preliminary
view.
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ENVIRONMENTAL EFFECTS OF A WAR IN THE GULF

1. As I mentioned yesterday, an Immediate Assessment will be produced by Monday, 7 January.
2. Meanwhile, for briefing purposes, here is a short note by the Assessments Staff which summarises the main points in their current draft. Although this has not been cleared interdepartmentally, it draws an preliminary discussions they have had with experts both in Whitehall (eg MOD) and also in the private sector (eg Dr Basil Butler of BP - much cited in today's newspapers).
3. Much of this can be quoted publicly, if necessary. We have sidelined the parts which should not be used.

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PERCY CRADOCK

3 January 1991

ENVIRONMENTAL EFFECTS OF WAR IN THE GULF

1. The environmental effects of war in the Gulf are impossible to predict with accuracy. This is partly because we can only guess what Iraq will do; partly because of the inherent unpredictability of many factors, notably the weather. Most important is the absence of any precedent which could serve as a guide.

Oil

2. There have been suggestions (eg from King Hussein) that in the event of war, the Iraqis could set Kuwait's underground oil reserves alight, with catastrophic effects on the atmosphere. We consider this view to be mistaken: except in very exceptional circumstances, oil underground will not burn, because of the lack of oxygen. If the Iraqis succeeded in setting alight oil at the surface (and we know that they have placed explosives at Kuwaiti well-heads and in refineries), it should be possible to put out the resulting fires in time to prevent significant atmospheric pollution (or loss of oil reserves) on a global scale. Nonetheless, this would be a major fire-fighting problem: a large number of fires at once could take months to put out. The problem would be greatly exacerbated if hostilities were prolonged, preventing fire-fighting teams from operating.

3. The Iraqis could release large quantities of oil from storage into the Gulf, to impede an invasion by sea. Allied strikes (by accident or design) on oil storage facilities and laden Iraqi tankers in Iraqi and Kuwaiti ports, could add to any oil slick so caused. Such a sequence of events could lead to significant damage to marine life in the Gulf, especially if fighting prevented early action to limit the damage, and could make it difficult to operate desalination plants.

Chemical and biological weapons (CBW)

4. Iraqi attacks with CBW, however deadly at the time, seem unlikely to cause lasting environmental problems, because of the relatively rapid rates of dispersal of the agents. The same considerations hold good for the effects of allied attacks on Iraqi CBW facilities (although short-term contamination could cover a wide area).

Nuclear

5. We judge that Iraq could not have any kind of nuclear device before mid-1991, at the very earliest. But Iraq's two nuclear-related sites could be the

target of allied attacks. Local contamination might well result: but this would probably be confined to the sites themselves, barring unusual weather conditions.

6. Anti-nuclear groups have claimed that an Iraqi attack on an American vessel armed with nuclear weapons could lead to the release of a cloud of radioactive smoke. The figures mentioned by these groups for the number of nuclear weapons in the region seem much exaggerated (eg "over 1,000", including those at Incirlik airbase in Turkey); and it is unlikely that there would be a sufficient number of successful Iraqi strikes on American vessels to pose an environmental hazard.

Other strategic targets

7. We are not aware of any likely allied target the destruction of which would lead to significant and lasting environmental damage. In particular, the rumour that major dams on the Tigris and Euphrates will be destroyed, leading to catastrophic flooding, is untrue.

Assessments Staff Comment

8. All wars are environmentally harmful: this one, if it occurs, is bound to be dirty. But even in the worst scenarios we can envisage, a Gulf war is unlikely to have the apocalyptic environmental consequences some are now claiming in public. The Iraqis have already wreaked considerable damage to the environment in Kuwait - and seem set to add to it, war or not. Moreover, much of the damage considered above would be a gratuitous act by Iraq: to cite that as a reason against conflict amounts to a variant on the hostage theme - i.e "If you attack, I shall make sure that an innocent bystander/the environment is harmed".

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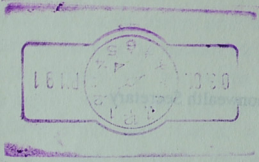
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Reference



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