Workshop notes

Hazardous substances and contaminated land
Friday 10 October 2014

Workshop lead – Michael Payne

Attendees:

Maragaret Hicks
Ross Baker, Top Energy Ltd
Dave le Marquand, Burton Consultants
Steve Tyson, Refining NZ
Hugh Pollock, Transfield Services Ltd
James Mitchell, NRC, Hazardous Substances Specialist
Stuart Savill, NRC
Dean Botica, Hawthorn Geddes
David Lourie, Forest and Bird

Regional council staff
Michael Payne, NRC,
Ben Lee, NRC,

Session 1: Discharges of Hazardous Substances

The opening session was preceded by a presentation by staff on the discharge of hazardous substance provisions of the operative Regional Water and Soil plan. It included an overview of the rules, issues with the current approach and suggested solutions.

The following key questions were used to guide discussion.

Key questions for the discussion:

1. *Is the existing 'no discharge' of hazardous substances to water or land threshold appropriate?*
2. *Is contamination of soil ok if it is not impacting the environment or other sites?*
3. *Are there other issues?*

<u>Discharge Provisions</u>

- Discussion opened with one of the attendees explaining an issue they have had with their infrastructure that contains a hazardous substance. Transformers hold oil, vehicle hit transformer, oil spilt into waterway. Spills the fault of a third party, can we have some context that gives some immunity.

- Council enforcement would look at these situations case by case. Prosecutions would be for serious issues eg negligence. Generally take a staged approach.

- <u>Passive discharges</u> - long term discharges - Regional plans should be managing passive/long term discharges. Districts plans and HASNO should deal with the

accident end of the spectrum, primarily through putting adequate controls in place to avoid or contain discharges (bunding etc.).

- There was some discussion around the current 'no discharge' threshold in the RWSP. It was suggested that some explanatory text around council's ability to exercise discretion about when/ in which situations it enforces this rule would be useful. Example of new person coming on board and has different view to previous enforcement officers, enforces the zero discharge limit without using any discretion.
- Thresholds are a form of discretion, e.g. Anzecc guidelines.
- Reality about enforcement is that it's about risk. Risk assessment process would determine appropriate course of action.
- There is not necessarily anything wrong with a no discharge of hazardous substances approach in the plan, provided there is room for discretion over when it is applied and that the ability to apply discursion is clear in the plan.
- Oil companies have been promoting rule for passive discharges (south land and ECAN). It's a screening process that guides at what point action is taken. Auckland has a similar approach. Some good elements of Auckland plan. One issue with setting permitted threshold across region is that a lot of land is probably contaminated, unless assessment made. Auckland approach potentially going to be good. Southland good.
- Canterbury - based on site investigation. They permit investigation on basis you provide ECAN the information. Incentives in the wrong place.

- Natural Attenuation - There is a place for natural attenuation (often a remediation option for hydrocarbons). Don't want a dig and dump approach. Expensive.

- What about air discharges? Will be talked about at 24 October air quality workshop.

- Where there has been contamination, and a long history of contamination, then this could be recorded and prevention measures put in place. Could put risk mitigation requirements in plans. Michael - could do.

- Managing hazards on site is easier when on private land compared to public land - higher risk. Discussed oil filled transformers and potential to put e.g. barriers around them to mitigate vehicle damage. It's a cost vs risk equation - there's lots of transformers next to roads and they don't often get hit. District plans will tend to control placement of transformers. Wouldn't like regional councils to get into managing land use.

- Prevention is better than cure, accidents do occur - is it not possible to identify physical locations where hazardous substance type industries cannot be located. E.g. where there is a water table near surface with porous soils. That's what the RMA removed - it's risk based and prove your case. It can be done. Zones do that to an extent - district council zones for residential activities tend not to attract hazardous activities. Regional Council often comment on plan changes and resource consent applications to provide advice on things like at risk aquifers, stormwater sewerage etc.

- Low risk contamination - Contamination of soil - if it's well contained, not having undue adverse effects, and within site boundary, then yes could look to permit these types of activities. If you take ownership of land that ends up being identified

as contaminated due to historic activities, then this would a permissive approach as discussed would be good.

  - Natural contamination, e.g. Puhipuhi - should there be need for clean up?
  - Need to think about whether your talking about contaminated land vs land that has been subject to hazardous substances. They have different RMA thresholds. In this case you probably want to be focusing on sites that have been subject to hazardous substance because the RMA test is lower.

- Any experiences with thresholds re: contamination above background levels? Auckland plan has it, though it can be a risky test. Important to relate it to background levels. Refinery - trying to determine background levels, can be hard e.g. land affected by road runoff. There are different types of background levels.
  - Background levels - Northland has varied soils often on a single site - makes it hard to determine background levels.

- Naturally contaminated sites (eg Puhipuhi), can still be utilised (eg farming) if undisturbed. But once disturbed can be a big issue. Would it be possible to red flag site? That's what hail sites are.

- <u>Earthworks on contaminated sites -</u> Generally require consents. Only comes up if identified as hail site. NES contaminated land has links to guidance.

- S32 - any management response has to link back to a legitimate issue. Don't put in place rules for things are not problems.

- There needs to be more coordination between district and regional councils on contaminated site management.

- Big issue is the eg small dump sites rather than the big industries because they are aware of the risks and how to manage them.

- Land use register - how's it going? Got new software, working with district councils, only limited info online yet. ECAN contaminated sites register is good? it has excellent public interface and contains lots of info NRC would like to do a similar thing - privacy issues.

<u>Education & other methods</u>

- What about domestic sources? How many hazardous products are getting into the environment through the use of chemicals around the home? Current rules say no to discharges, but we don't enforce at a house hold level unless council is notified of a significant discharge. Volumes are generally low and the products have already gone through HASNO vetting.
  - Some councils have guidance material e.g. for car washing.
  - In Germany not allowed to wash car outside a car what's facility. It's risk based - is the monitoring picking it up as a problem? Council is not necessarily monitoring it.

- Burn offs - burning of tanalised timber. It's not allowed.
  - Monitoring and enforcement - it's by complaint. \

- Education - can be helpful...particularly if examples can be given e.g. of enforcement. NRC should think about upping be education. ECAN - pocket builders guide a really good example.

- May be the rules could be clearer e.g. rather than saying 'no hazardous substances' say concrete cutting operations need to be contained - otherwise people might not know that they are not meeting the rules. The other side to this is that maybe the rules are ok but education needs to be increase. There are some good examples of educational material from other councils. Education could be targeted at individual industries identifying when rules are breached and options to avoid or remedy breaches.

- Councils could offer rates relief or the like for activities that provide a social and environmental value e.g. car washing.

- Regional council could work with other regional councils to prepare industry guidance - if so, then have same information across the country rather than each council doing its own thing.

- Rates notices - the opportunity to distribute information to households.

- A good way to get people to comply would be to explain the risk of eg burning contaminated material and that it could lead to a contaminated site - and therefore they could become a HAIL site.

- Could target landlords with education.

Session 2: Waste oil on roads.

In a similar fashion to the first session staff presented an overview of the current rules for the use of dust suppressants, identified the reasons why council was reviewing the use of waste oil and outline potential solutions along with the potential environmental and health effects of using waste oil as a dust suppressant.

The following questions were posed to prompt discussion:

1. *Are there other options?*
2. *Should council relax the rules for waste oil for dust suppression?*

<u>General discussion about dusty roads</u>

- Could logging trucks could put water down e.g. tank on back of trailer with dispersal?
  - Unlikely to be practical. Water carts are sometimes used.
  - Forestry company has used dust lock. Issue is that any product will attach to dust and this dust can then be more contaminated.

- Dust is part and parcel of living on a gravel road, but exacerbated by logging trucks. Southland use oil, seems to be effective - in the past there were issues with odour but they've improved their application practices.

- Could we ban trucks from gravel roads?

- Trucks pay road user charges. They have just as much right to be on the road as anyone else.
- Some of our dusty roads have been purposely built for logging trucks.

Dust suppression

- How much to the put on (waste oil)? They oil the section of road in front of a residence. Only enough to saturate surface.

- Road prep is important for any type of dust suppressant..

- A variety of dust suppressants have been trialled in Tauranga. Best suppressant they found was dairy effluent!

- Supply of waste oil may be an issue - May not be as much of it around nowadays.
    - Holcim use a lot of waste oil which is likely to impact on the supply for dust suppression.

- Waste oil - refined vs raw? Very different effects.
    - Current rules are designed around this.

- On potential solution is to seal a stretch of road just outside of a house - the stretch could be a few 100m anyway. If you do one then you creates expectation.

- Oil companies got rid of waste oil reciprocals at service stations, they were messy etc. Probably a bit going to tip?

- Probably a political issue at the end of the day - some participants were of the that it didn't sit right to allow a contaminant to manage an issue.

- Experience from forestry is that affected people would unlikely be happy with an oiled road anyway.

- Oiled road would be a hail site! Road works would then trigger resource consent requirement for earthworks on a Hail

- Could limit the use of waste oil to discretionary activity / or non- complying to particular roads or parties (e.g. district councils).
    - Monitoring and enforcement - how would you do it? Very difficult to monitor application etc. if the door is opened to waste oil. Particularly if it is a permitted activity for residents to apply oil in front of their own properties.
    - Use of waste oil on roads was not well supported by those attending the workshop – there are better alternative for a similar cost with less environmental effects – waste oil on roads does not feel right.

Session 3 : Solid waste

This session began with an overview from council staff on the current approach to managing solid waste. Discussion was largely focused on rural waste practises and clean fill.

The following questions were posed to prompt discussion:

- Managed *fill as a controlled activity?*
- Should *onsite rural waste disposal continue to be permitted <12m^3 per year?*

Rural / on-farm landfills

- Are there lot size restrictions? No, setbacks though would limit size.

- Restricting rules could increase fly tipping. Fly tipping is a problem. for district councils and foresters. If you can get 80% of people to comply, then that's a good gain.

- Consenting rural dumps would allow for monitoring and so that we know where they are.

- At the moment there are no requirements around how they are constructed.
  - Should be some mandatory requirements around.

- If rural dumps are legally only for household rubbish then why should they get free dumping?
  - Farm waste is also allowed to be dumped but there are some restrictions on what can go in the land fill e.g. no agri chem containers
  - Industrial activities have to pay for disposal, so why not farmers?

- Link it back to Fonterra or Dairy NZ? These organisations have strong environmental programmes tied to their marketing and branding. Waste disposal should be part of it.

- There is a risk of fly tipping if councils rules become more restrictive. Forestry already have issues with fly tipping. If forestry don't have gates then people will dump in forest.

Clean fill

- Clean fill - roading, will work with local landowners. 1000m3 – Roading contractors would like the 1000 cubic metre threshold to be increased.
  - It's no difference than earthworks. It should be about effects.
  - Problems particularly where you have storm events and there's a lot of material to get rid of from slips etc.
  - Really hard to find large sites for disposal. Access / proximity to the source of material being collected for disposal is key.
  - If you increased limit but improved controls would that be ok?
  - Monitoring difficult to prove the quantities when it's yearly. Could remove quantity limit and just have controls to manage adverse effects.

- Current rule isn't clear how it deals with stockpiling material.

- Issue with current rules is vegetation - slips often have element of vegetation in it.
  - Managed fill as a new category could be the way to deal with it – Council is considering applying a controlled activity status for managed fill.

General issues

- Some companies currently inform council about things like earthworks because it is good practise - should be in the plans. We need to know where dumps are to be able to analyse them.

- Talked about potential for new 5 day controlled activity processing. that may come in with RMA reforms

- Permitted activities - could charge for monitoring if after first monitoring a problem is picked up.

- Impacts of NES forestry? We live with what we get dealt with.

- Contaminated land - we don't want to have to get consent from regional council if also need consent under NES for contaminated land. Don't want to have to apply for two lots of consents. Not a problem now. NES is primarily about human health.

- So many different levels for different contaminants plus soil types means it very difficult to have rules based around contamination levels.

- Standards in NZ seem to be more relaxed than Australia.
    - This is largely due to industry self regulation.
    - Is there any way to get smaller operators to act responsibly? Small operators don't have the capacity to have environmental management ability. Could have an accreditation? Still get back hard operators. The legislation and the rules are there - that's not the problem. Issue is where it's a permitted activity.

- Amnesty on collecting hazardous substances - will that happen again? Better that we collect than it get dumped.
    - It is still going but on a smaller scale. $27 a kg to get rid of it. Tons of stuff out there - battery collection - where do they go?
    - NRC used to do it. We tell people not to do things but don't offer a solution.
    - Paper work to get rid of hazardous substances is complicated - still better to have one agency to deal with it... Otherwise it just goes into the river.
    - Central government attitude seems to be if we don't have to pay for it now...

- Asbestos becoming a problem. Government seems to be ignoring it.

- Annual plan process drive what councils do - public drive it.

- Solvent recovery plant at Ruakaka, the problem is that there's no ongoing monitoring - they can get away with anything. Need to have un-notified monitoring. They store toxic chemicals, aquifer underneath and sand. While awe want to encourage recycling, need to insure it's well monitored - can't have them self-regulating. Not a good location for it. Want to make sure this kind of thing doesn't happen again. Materials are flammable, right next to refinery's oil pipe line. James explained what's happened re agencies involvement - e.g. work safe and fire service.