

NWPPA Spray Drift: A registrants perspective

Dave Rumbold, 23 March 2018

Methodology used to determine regulatory acceptable levels (RAL's)

- Consistent with international best practice
- Transparency and predictability have improved significantly
- More flexible when applied in conjunction with SDMT (e.g. allows assessment of deeper water bodies for the first time)

Standard scenarios and deposition curves that define realistic worst case situations and are used to generate on-label spray drift buffers

- Aerial and vertical sprayer scenarios provide a more realistic estimation of drift and/or are more statistically significant
- Additional investigation (including consideration by registrants) is required for ground boom scenario modelling before any implementation
- It is important to note that these scenarios are defaults; with any APVMA assessment, applicants retain the ability to submit argument for alternate approaches with appropriate information
- Transparency and predictability is also significantly improved regarding the types of use scenarios which will not require spray drift assessment (e.g. drop nozzles below crop canopy, inter-row herbicide application, etc.)

Spray drift data guidelines to support the generation of custom deposition curves

- Provides clear direction on what APVMA would accept as a default
- Retains registrants ability to present alternate approaches on a case-by-case basis (typically through PAA)

On label spray drift instructions

- Generally much more relevant and clearly linked to protection goals (e.g. defining irrigation channels to not require buffer zones, etc.)
- Some additional terms need to be defined (e.g. 'target' with respect to setting boom or release height)
- Several relatively minor suggestions will be raised in submissions to APVMA

Spray drift risk assessment tool

- Tool itself is effective, efficient and repeatable and provides registrants with the ability to predict the outcome of spray drift risk assessments prior to making a registration application (dependant on RAL determination)

Spray drift management tool that allows chemical users to refine these realistic worst-case risk assessments based on their own circumstances and recalculate buffer zone distances accordingly

- Like the SDRAT, the tool itself is much more efficient, effective and repeatable.
- Stage 1 is an incremental improvement on the current policy; Stage 2 is required to take a significant step forward by reducing regulatory effort and making it more accessible to specific use situations.
- Stage 2: underlying data should all reside centrally with APVMA, but the web tool itself should be opened for different industry groups and service providers to link to it (e.g. to allow simplification, integrated with farm management software, etc.)

Interim measures prior to an interactive web based tool being available (stage 2) and legislative requirements to enable off-label spray drift conditions set by the tool to be enforced

- Label instructions should be flexible enough to apply at Stage 1 and Stage 2:
 - This would allow a seamless transition between the stages and reduce burden on APVMA and registrants.
 - Without this consideration, applications to update labels would be required for every product and new label artwork would have to be commissioned and printed.
- More and more complex risk mitigation measures are being required (largely made possible by moves from screening level assessment to real-world location based approaches), so any changes required to Control of Use legislation with respect to accessing online tools should apply generally (not just for spray drift)

Interim measures prior to an interactive web based tool being available (stage 2) and legislative requirements to enable off-label spray drift conditions set by the tool to be enforced

- An automatic permit should be issued by APVMA during Stage 1 whenever a label is approved under the policy:
 - This would be more efficient for registrants and user groups and cover the most simple options to change buffer zone distance (e.g. one droplet size larger, lower wind speed, reduced rate where labelled, etc.)
 - It would then promote a greater focus on situations where large buffer zones still remain and only additional measure require a specific permit

Drop Size	Wind Speed	Rate	Water Depth	Boom Height	Aquatic Buffer	Vegetation Buffer	Livestock Buffer	Pollinator Buffer	Human Health Buffer
M (label)	20 (label)	1 L/ha (label)	15cm (label)	50cm (label)	100	20	50	5	25
M	20	1 L/ha	15cm	70cm	120	25	60	5	30
M	20	1 L/ha	30cm	50cm	60	20	50	5	25
M	20	1 L/ha	30cm	70cm	80	25	60	5	30
M	10	1 L/ha	15cm	50cm	70	15	30	0	15
M	10	1 L/ha	15cm	70cm	90	20	40	0	20
M	10	1 L/ha	30cm	50cm	10	15	30	0	15
M	10	1 L/ha	30cm	70cm	15	20	40	0	20
C	20	1 L/ha	15cm	50cm	60	12	30	3	15
C	20	1 L/ha	15cm	70cm	72	15	36	3	18
C	20	1 L/ha	30cm	50cm	36	12	30	3	15
C	20	1 L/ha	30cm	70cm	48	15	36	3	18
C	10	1 L/ha	15cm	50cm	42	9	18	0	9
C	10	1 L/ha	15cm	70cm	54	12	24	0	12
C	10	1 L/ha	30cm	50cm	6	9	18	0	9
C	10	1 L/ha	30cm	70cm	9	12	24	0	12
M	20	0.5 L/ha	15cm	50cm	50	10	25	3	13
M	20	0.5 L/ha	15cm	70cm	60	13	30	3	15
M	20	0.5 L/ha	30cm	50cm	30	10	25	3	13
M	20	0.5 L/ha	30cm	70cm	40	13	30	3	15
M	10	0.5 L/ha	15cm	50cm	35	8	15	0	8
M	10	0.5 L/ha	15cm	70cm	45	10	20	0	10
M	10	0.5 L/ha	30cm	50cm	5	8	15	0	8
M	10	0.5 L/ha	30cm	70cm	8	10	20	0	10
C	20	0.5 L/ha	15cm	50cm	30	6	15	2	8
C	20	0.5 L/ha	15cm	70cm	36	7.5	18	2.5	9.5
C	20	0.5 L/ha	30cm	50cm	15	3.75	7.5	1.25	4.75
C	20	0.5 L/ha	30cm	70cm	18	4.5	9	1.5	5.5
C	10	0.5 L/ha	15cm	50cm	15	3.75	7.5	0	3.75
C	10	0.5 L/ha	15cm	70cm	18	4.5	9	0	4.5
C	10	0.5 L/ha	30cm	50cm	6	1.5	3	0	1.5
C	10	0.5 L/ha	30cm	70cm	6	1.5	3	0	1.5

Thank you.

Any questions?

