

### Network Outcomes Contract Governance & Management Group Clarification

Reference Number:	NOCC No.8
Subject Title:	OPM Group 6.1.6 Flushing
Issue Date:	1 June 2016
Clarification Purpose	Clarification is provided to ensure the NOC is being interpreted consistently. The clarification does not remove or supersede the Network Outcomes Contract documentation.

## **SUBJECT**

OPM 33b is audited bi-annually in October and April. It is our interpretation that OPM 33b is a bit subjective as bleeding is unlikely to occur on or about the date of the audit and is significantly influenced by network location. What is the purpose of this OPM if indeed it is unlikely to be triggered during an audit?

OPM 33a and OPM 33c audit is bi annually and are to be undertaken in October and April. While it is clear that the 100% assessment in April will utilise the HSD survey data, what is intended for the October 100% audit?

Furthermore OPM 33c is an interesting one. That is a piece of road could have a lot of texture variation due to say flushed wheel tracks but not trigger OPM 33a. If I understand correctly what the OPM is trying to achieve is that the contractor will make an effort to address texture variation as part of a pre reseal treatment? However what is happening in a number of cases is that the texture variation is accepted and that the reseal itself is designed appropriately to take account of this. Can you confirm what the Agency's intent is?

OPM 33c the wording in this OPM indicates that a defect is when texture variation will not impact negatively on the long term performance of resurfacing works, I suggest that the word "not" should be removed?

OPM GROUP 6.1.6: FLUSHING (100% SAMPLE SIZE, MEASURED BI-ANNUALLY)					
ОРМ	ROAD CLASS	CONTRACT STANDARD	DEFECT	PIP	
33a	All Roads	No defects.	Areas within a carriageway ≥ 10m long that are flushed and constitutes a safety hazard (i.e.		

#### OPM GROUP 6.1.6: FLUSHING (100% SAMPLE SIZE, MEASURED BI-**ANNUALLY) OPM ROAD CONTRACT** DEFECT PIP **CLASS STANDARD** macrotexture is ≤ the threshold level for macrotexture as specified in T10 "Specification for State Highway Skid Resistance Management") and either: a. In addition to low texture the Within two SCRIM coefficient is $\leq 0.35$ months of unless a joint inspection has receipt of the determined that SCRIM SCRIM exception improvement is not warranted, report

or

b. The texture will impact

Any area within a carriageway

Surface texture and texture

variation will not impact on long

term performance of resurfacing

where bleeding of the binder may lead to the binder being tracked onto the adjacent surface.

negatively on the life of a

surfacing renewal treatment.

Prior to

renewal

1 week

Prior to

renewal

undertaking

resurfacing

undertaking

resurfacing

## **RESPONSE**

33b

33c

All Roads

All Roads

The Contractor has been engaged to safeguard the Agency's investment and maintain continued progress towards regional and national objectives, which is to support the Government's Safer Journeys Strategy by delivering a Safe System approach to road safety, the Contractor will:

works

- Maintain the infrastructure in a serviceable condition so that it performs its role well
- Identify opportunities to improve the safety of the Network.

No defects.

No defects.

Furthermore and as stated within the Maintenance Specification the Contractor is to proactively manage Network skid resistance performance by including appropriate skid resistance considerations in all asset management decisions.

To ensure it is clear the following response is provided which covers all elements of OPM Group 6.1.6 and OPM Group 5.5.1

Within the Conditions of Contract Risk profile item 23 to 25 apply to skid management.

23	Treatments of Priority A Sites, as identified within the annual skid resistance exception report, on road sections not treated by the Contractor and are not flushed.		Risk Excluded
24	On road aggregate ESC value (polishing) below the specified ESC value (IL-0.02), as measured at minimum after 24 months from construction by the Principal's SCRIM survey.		Risk Excluded
25	Areas within a carriageway ≥ 10m long that are flushed and constitutes a safety hazard (i.e. macrotexture is ≤ the threshold level for macrotexture as specified in T10 "Specification for State Highway Skid Resistance Management") and either:  a) In addition to low texture the SCRIM coefficient is ≤ 0.35 unless a joint inspection has determined that SCRIM improvement is not warranted, or  b) The texture will impact negatively on the life of a surfacing renewal treatment.	Risk Included	

Sites treated by the Contractor have different risk profiles and cognisance needs to be given when assessing these flushed sites including ESC performance and design life factors.

#### ОРМ 33с

The wording for OPM 33c is incorrect and should read "Surface texture and texture variation will not impact on long term performance of resurfacing works". To date the intent of the OPM has been interpreted correctly.

#### OPM 33a and OPM 33c

For National consistency the April measurement is based on the results of the HSD survey but should be measured against receipt of the HSD exception report. This ultimately becomes the program by which the Contractor is measured to demonstrate compliance of addressing the defects in the 12 month period. It should also be used as a check against the reseal sites for the coming year to ensure defects have been completed prior to resurfacing as required for under zero defects pre-reseal repair strategy.

The October assessment is based on a visual inspection and may be tested against more manual processes such as sand circles and British Pendulum tests. The point of the second OPM survey undertaken prior to the construction season is as noted above, the opportunity to check against the SCRIM exception report and achievement of the agreed treatment program.

In some cases it is not reasonable to expect a Contractor to have physically addressed all programmed defects by the October audit, given that a number of SCRIM seal sites will be treated as part of a reseal program. In these cases the program would have clearly identified a two stage treatment being sign posting and then resealed, as such these sites would not be deemed a defect if the Contractor was compliant with the agreed program. Where the agreed program has not been followed then the site would be deemed a defect.

In the case where flushing may have occurred outside the HSD survey and in the opinion of the Contractor or the Agency these sites are considered a safety hazard then provided they are greater than or equal to 10m in length then a treatment needs to be agreed with the Principal and the cost assigned to relevant party. Where disagreement arises as to the validity of the safety issue then the Agency would cover any test costs. Initial response to manage these sites is covered under incident response.

The following examples are provided to aid in clarity, treatment and cost considerations.

Question	Example	Response
The flushed area inner wheel track is 27m long, SC < or = 0.35, MPD < TLM and next resurfacing is 2 years away		Yes this is an OPM defect and should be treated with water cutting.  Contractor cost
The flushed area inner wheel track is 27m long only 15m has, SC < or = 0.35, MPD < TLM and next resurfacing is 2 years away		Yes this is an OPM defect and should be treated with water cutting.  Contractor cost for 15m and Agency may agree to fund the additional 12m to treat the whole site
The 2 flushed areas (on curve) are both 8m long, SC < or = 0.35, MPD < TLM the next resurfacing is 2 years away		No this is not a defect but should be treated by water cutting.  Agency cost
The flushed area inner wheel track is 27m long, SC < or = 0.35, MPD < TLM and next resurfacing is next year and the treatment is sandwich seal		Yes this is a defect but is programmed for treatment by sandwich seal. Water cutting not required now. OPM defect not registered. Note, Contractor may choose to water cut prior to sealing to assure design life.  Site should be temporarily sign posted until resurfaced

Question Example Response

The flushed area LH Lane is 100m long, one area 21m long indicated in blue circle has an SC < or = to 0.35 and MPD < TLM and next resurfacing is 2 years away and the treatment is sandwich seal. There is no visible difference between texture inside and outside the circle and it is believed the site has changed since the scrim truck went through in November



Yes this is an OPM defect. Treatment is too late and should be included in next year's program. Sandwich seal is appropriate treatment. Water cutting not required.

Site should be temporarily sign posted until resurfaced

Pavement and prereseal repairs required

It goes without saying when designing a site treatment addressing texture variation is a key consideration. OPM 33c ensures that treatments proposed do not negatively impact on the expected design life. Such that sandwich seals would address a number of flushing issues without the need to water cut. Whereas, other surfacing options would likely require texture variations to be addressed by water cutting or other pre-reseal repair treatments. The treatment of texture variation does not specifically relate to flushed sites alone as defined in OPM 33a but to any texture variation which would have a detrimental effect on the life of the surfacing treatment.

#### **OPM 33b**

The purpose of OPM 33b is to capture bleeding on the network. As indicated the audit itself is unlikely to align with bleeding issues on the day but the rather the OPM allows for two key elements;

- 1. A response to bleeding on the network, and
- 2. Assessment of the appropriateness and timing to the treatment of the bleeding issue.

In the first instance bleeding is likely to have two negative impacts one being safety and the second being asset integrity. As such bleeding issues will initially be responded to through incident response and is therefore covered under the lump sum. An appropriate treatment of the bleeding issue is dependent on whose works are causing the issue such as Contractors own works, third party works or surfacing deterioration which are not the Contractors works. Collaborative agreement should be reached as to the appropriateness of any treatment such as spraying water over the site, application of small chip and would be included in the incident response time.

While the Principal could issue a PIP to ensure the bleeding issue is addressed within one week, as stewards of the network and the potential impact on the asset integrity the Contractor is incentivised to address the issue more rapidly.

Therefore the purpose of the OPM audit in April is to assess whether appropriate action has been taken at sites which have bleed and the October audit will identify potential sites and the Contractor and the Principal should agree an action strategy.

### **SCRIM Exception Report Action**

There are three key elements to managing SCRIM exceptions;

- 1. Following T/10 process,
- 2. Developing a program of work to address SCRIM exceptions,
- 3. SCRIM Exceptions have been addressed in accordance with the agreed program.

The Contractor has a number of key points to consider when managing SCRIM issues on the network;

- 1. Identify opportunities to improve the safety of the Network,
- 2. Proactively manage Network skid resistance performance,
- 3. Prompt consideration of SCRIM exception sections which may have priority for treatment,
- 4. Sites selected for treatment from the investigation of priority A sites shall be programmed for treatment as soon as is practicable,
- 5. If time to carrying out maintenance to increase skid resistance exceeds 6 weeks from receipt of exception report, signage shall be considered.

OPM 15 states "Incomplete evidence that all Priority A sites have been addressed in accordance with NZTA T/10, within 3 months of receiving Annual Exception report". Evidence would be satisfied in part by provision of the SCRIM Site Investigation Report.

OPM 33a has a PIP which enables the Principal to issue an instruction for the Contractor to complete works at SCRIM sites within 2 months of receipt of the SCRIM Exception report.

The maintenance specification states under managing defects that "It is not sufficient to address only those defects identified in just the audit section or lengths alone". Address in this context means repair.

Finally, KRA 2 Road User Safety supports a Contractor who proactively manages safety on the network. There are other effective ways of treating flushed areas in particular during the height of summer rather than sign posted for 6 months and Contractors should look for these opportunities to improve safety which would be recognised under the Road Safety User kpi's.

None of the timelines stated in any of the relevant documents are in conflict with each other, the intent was to ensure SCRIM was being appropriately and proactively managed.

OPM 15 aligns with T/10 in that sites have been addressed in accordance with T/10 which supports sites being sign posted, treated or programmed for treatment. The OPM is not just about delivering a report to the Principal on proposed treatments, it demonstrates that the requirements of T/10 have been met and as a minimum signage is in place.

OPM 33a is further backup to OPM 15 ensuring the contractor has completed works which can be completed in the current program and should not be left to the following season. In cases where the treatment should have been completed but was not, the PIP would be issued and unless an agreed timeline to treat was reached and completed a PNC would be issued monthly for each site.

# **CONCLUSION**

The Contractor is to proactively manage Network skid resistance performance and the specification has a number of tools to support Contractors who are proactive and to ensure Contractors respond to safety and asset integrity issues on the network in a timely manner.