High Council for Public Health

STATEMENT

on scientific and technical support relating to the recast of amended Directive 98/83/EC on the quality of water intended for human consumption

26 March 2018

Foreword

Through the referral of 20 February 2018, the French Health Authority (DGS) requested the opinion of the French Public Health Council (HCSP) for scientific and technical support for the recast of amended Directive 98/83/EC on the quality of water intended for human consumption (WIHC).

More specifically, HCSP was asked for:

- An assessment of the new parameters added for monitoring water quality (Annex I of the Proposal for a Directive).

- A prioritization of the new parameters proposed and the revised standards in terms of health issues, while taking into account the technical/economic issues and any point that seems of major interest to be pointed out with regard to the management procedures that are to be considered following the possible adoption of this new text.

I- General considerations

- As the draft directive specified that it had not followed some of the WHO recommendations, HCSP questions the deviations from the recommendations of an international body bringing together the best global expertise.

- The draft proposes to remove the possibility of temporary waivers. The main argument is that the waiver "was included in the Directive to enable Member States to comply with the parametric values newly set in 1998". This new directive includes several new parameters for which analytical methods are not consolidated for the target thresholds and the diversity of territorial situations would not allow compliance with this new regulation, in particular in terms of additional costs incurred. It becomes very difficult to resolve cases of non-compliance related to slight exceeding of limit values and to allow the time required for the public or private entities responsible for water distribution (PPRDE) to implement management operations. An improvement of the treatment channel, the construction of a new plant or the supplying by an alternative resource requires several months of preliminary studies, administrative procedures, procurement and implementation. For parameters for which the exceeding of regulatory values

are considered temporarily allowable and without health risks, suitable time for the implementation of remedial solutions is thus required.

It thus seems important to retain the possibility of temporary waiver, while defining it in particular by calling for the planning of management measures and allowing it a maximum, non-renewable time limit which could be two years.

- The draft removes the distinction between quality limits and quality benchmarks and, by the same token, removes the requirement to measure certain parameters albeit considered to be very important in protecting the health of populations. While these aspects will be discussed in further detail, HCSP considers that the quality benchmark concept should be maintained for the parameters mentioned further on in the text (Aluminium, iron, sulphates, etc.). This choice has led to the disappearance of certain parameters already mentioned as of interest (Aluminium, iron and pH) or has changed the role of certain others (total culturable flora) which is detrimental to the monitoring of certain aspects that can indirectly influence health risks. They should be controlled in drinking water treatment plants and their disappearance may result in certain plants no longer monitoring them.

- There is some vagueness about the definition of control points in Annex 1 of the Proposal for a Directive, which suggests that all measurements should be made at the consumer's tap. In addition, the relevant parameters for the purposes of assessing the risks associated with domestic systems are said to be *Legionella* and *Lead*, thereby disregarding copper or nickel in particular, even though they are listed in Part D of Annex 2 to the Proposal for a Directive.

- The draft refers, for several parameters, to a decision said to be based on the precautionary principle, whereas the limit values are set according to levels of environmental risks rather than health risks. New parameters are thus included in the Directive without a risk analysis appropriate to the health level (see II-2-1, in the case of endocrine disruptors), which may give rise to an additional concern on the part of consumers about tap water and thus have an effect opposite to the one sought.

- The removal of aspects associated with the quality control of materials in contact with water is highly problematic. In view of the large number of cases of refusal of health conformity observed in France for materials in contact with WIHC, it is important to maintain a marketing prevention policy which does not allow, on the pretext of free movement, the marketing of materials which may release undesirable compounds into water. For this purpose, the harmonisation of assessment methods is therefore absolutely essential.

II- Regarding the new parameters

The new parameters included, as compared with the existing Directive, call for the following remarks:

II-1 Microbiological parameters: WHO proposes the following parameters as quality benchmarks for the assessment of treatment effectiveness:

- *Clostridium perfringens* spores as indicators for pathogenic parasitic protozoa.
- Somatic coliphages as indicators for enteric viruses.

II-1-1: *Clostridum perfringens* spores: This parameter is an indicator of treatment effectiveness (filtration, disinfection). Its presence reflects a malfunction in the drinking water

supply channel or indicates contamination of the water being distributed in the system (pipe breaks), which generally results in the concomitant presence of other contamination indicators (coliforms, enterococci).

As such, this parameter should be maintained as a quality benchmark. If, however, the quality benchmark concept were not to be re-established, it could not be considered sufficiently relevant to be imposed in the health monitoring of all samples.

In addition, the specifying of "*perfringens*" calls for microbiological identification in the colonies having appeared, thereby delaying the laboratory's response time and increasing the analysis cost. The heading "sulphite-reducing anaerobic bacteria spores" does not call for the identification of *C. perfringens* and is a sufficient indicator for the intended purpose.

II-1-2: Somatic Coliphages: This parameter is primarily an indicator of viral abatement in drinking water plants. The number of laboratories performing this routine analysis is low in France.

There is a clear lack of objectivity and information, at least in France, with regard to this parameter applied to WIHC and particularly in samples taken in systems and at points of use. HCSP is not, even with regard to the feedback from the professionals interviewed, in a position to assess the effect of including this parameter for the production and distribution of WIHC in France.

This parameter is certainly of interest for the disinfection monitoring and risk assessment of raw water and the sizing of the treatment channel.

Difficulties in complying with the levels of somatic coliphages in distribution systems have been reported. Before including this parameter definitively for the checks at points of use, there appears to be a need for a preliminary observation phase to develop the analytical capability, carry out cross-calibrations to check analysis reliability and obtain sufficient results for assessment.

II-1-3 Coliform bacteria: This parameter was once included in French regulations and its maintaining is of no particular note.

II-1-4 Total plate count of heterotrophic bacteria: the term "numération sur plaque" is false and corresponds to an incorrect translation of the term "total plate count" in English. The term in the corresponding NF EN ISO 6222 standard is "enumeration of culturable micro-organisms".

While it is an overall indicator of cleanliness, its health interpretation has never been confirmed. It is of interest for the monitoring of possible anomalies, which could justify it being included in quality benchmarks, but not as a quality limit – especially with a parametric indication as vague as the one proposed: the term "no abnormal change" means absolutely nothing without an indication of the "normal" interval.

Present in the existing directive as a quality benchmark, the Public Health Code (CSP) specifies "variation in a ratio of 10 compared with the usual value" which is already a fairly simplified concept but more acceptable than the one proposed in the new text. As imposed and presented in this way, this parameter can only make for major interpretation complexities in WIHC distribution management at points of use without, however, guaranteeing health protection. If it were to be maintained, it could only be as a quality benchmark with an indication such as that of the CSP.

Monitoring may be relevant at the quality limit in the case of packaged spring water production, the quality of which is assumed to be fairly constant and the packaging system of reduced length but not in a public system.

II-1-5 Turbidity: semantically speaking, this parameter appears to belong to the microbiological class. This is a shortcut that should be clarified as it is a physico-chemical parameter. While an increase in turbidity is often associated with the presence of micro-organisms, this is not an absolute rule. In terms of microbiological risk monitoring, it is of major interest for checking the proper operation of distribution channels and water quality. While high turbidity does not necessarily mean a microbiological hazard, its probability of presence is significant. It is important to beware of a misinterpretation that could cause managers to simply measure turbidity as an indicator without carrying out bacteriological analysis on the pretext of turbidity being consistent. This parameter should be measured during and after treatment but also in the system.

II-1-6 *Legionella*: France has already adopted an action policy aimed at reducing the risks associated with legionella in hot water systems. It might therefore appear that the including of this parameter to assist the management of domestic systems does not pose any problem in France. It should be noted, however, that the text proposes that this monitoring should be carried out for all domestic systems without distinction of sites, which may imply that the monitoring is carried out at all points in the system even outside those of public access buildings. The question of sampling arises: should it be limited to collective housing defined as having at least two apartments?

While recital 11 p39 recommends not measuring at all points, it advises carrying out a risk assessment associated with domestic distribution without providing any details. This relates to HCSP 's remarks on the case of domestic systems (paragraph IV-3).

Without further clarification, the text indicates that the sample should be taken in the cold water system and overlooks the hot water system. A few rare cases have revealed the presence of legionella in cold water systems in summer when the temperature increases. Only monitoring the cold water system would not make sense. A nonconformity in a domestic system will call for action, the responsibility for which will have to be established between the water supplier and the system owner.

Searching for *Legionella* and *Legionella pneumophila* simultaneously, rather than sequentially, would save time.

The establishing of a limit value for *Legionella sp.* does not appear to make any sense since the risk in European countries is caused by the presence of *Legionella pneumophila*. This would be tantamount to endorsing a position defended some 20 years ago by the Netherlands and rejected at a European meeting on this subject. There have been no new arguments to suggest that this rejection was unfounded.

So a limit value of 1,000 CFU/L should be set for *L. pneumophila*.

II-2 Chemical parameters

II-2-1 Endocrine Disruptors: While WHO has assessed endocrine disruptors, it has not included them in recommendations since the health risks associated with WIHC, which is regarded as a minor source of exposure, are considered unlikely. The including of endocrine disruptor (ED) hazards in the EC text is innovative. The including of the three parameters 17 β estradiol, nonylphenol and bisphenol A (BPA) is qualified by the "*precautionary principle*" and the

choice of molecules is justified by considering them as "*benchmark factors since they are known to be present in surface water resources affected by wastewater treatment and other discharges*". Should the term "benchmark factors" be interpreted as a concept associated with "indicators" of the presence of hazards with ED effects? This absolutely cannot be the case since the diversity of molecules with ED effects is huge and is continually increasing and there are no molecules that indicate this diversity. Some parameters, currently used in health monitoring (some pesticides, Cadmium) and others that it is proposed to add (some PFAS) are EDs.

The Commission's choice, associated with the WHO document which stresses that their presence in the environment has an impact on ecosystems, relates to three different molecules, not representative of all EDs and of variable interests.

Risk assessments for EDs are currently fairly advanced for environmental risks but not significantly for health risks. Given this very important concern, setting "environmental" values for molecules that are not necessarily representative may thus bring about an effect opposite to the one desired, namely consumer distrust of tap water!

- 17β estradiol is very rarely detected in resources even influenced by wastewater treatment plant discharges. Other molecules with ED effects are also very important such as phthalates or some pesticides. This choice does not appear to be guided by a scientific confirmation of the exposure risk. This parameter should be removed and included in a watch list.
- Nonylphenol: While a few cases of presence have been reported in literature, this has almost always been in raw water. This measurement should therefore be limited to treatment inlet/outlet channels.
- BPA may be released in particular by polycarbonate packaging or epoxy sealing resins. Cases of contamination in systems and in certain packaging have thus been found and this ED has proven and significant effects. Very little information on tap water is available.

Analytical methods required to achieve the established quality limits still need to be consolidated and confirmed by inter-laboratory procedures to ensure the reliability of the results.

Given the major importance of the subject of EDs, it therefore seems premature to include these three molecules without drawing up a consensual list based on analysis campaigns and an assessment of the potential sources of contamination of water resources by EDs, at Community level, to avoid allocating large budgets on poor targets. The case of 17 β estradiol is certainly the most questionable given the very low probability of presence. Nonylphenol could be controlled in factories and BPA is justified but analytical developments still need to be consolidated if they are to reach the proposed quality limit confidently.

II-2-2 Chlorites, chlorates: the proposed limit values are consistent from a health standpoint; it is important to note, however, that they lead drinking water operators to consider, with regard to the proposed limit values:

- That bleach suppliers should be made to market higher quality products and buyers should have to check the conformity of purchased products, which can only be a step in the right direction
- That it will no longer be possible to use chlorine dioxide for the treatment of WIHC, which has often provided excellent services (biocidal action on biofilms, system stability, low level of halogenated by-products, reduction of flavours, etc.).

II-2-3 Haloacetic acids (HAAs): WHO proposes to include this parameter in addition to THMs since HAAs are generated under more acidic conditions, so as to provide two indicators to cover the wider range of disinfection by-products that may be formed. Correlations exist between THM and HAA concentrations that could make their measurement unnecessary since only one calculation would be needed. This remains to be confirmed and, if this were the case, the existing models would then need to be confirmed at European level to avoid analysis expenditure while maintaining a limit value. The model should then really be confirmed for a number of types of water with various physico-chemical characteristics.

The same score as the one specified for the THM parameter should be added to this parameter to aim to reach a value lower than the limit value.

II-2-4 Microcystin LR (MLR): France had already included this parameter in the CSP and then changed it to "total microcystins" due to the large number of variants of this toxin. Limiting considerations to MLR is reductive and the parameter should be considered as "total microcystins". Although the long list of microcystin variants means that a complete analysis is not possible, especially since certified standards are not available for all molecules, specialized laboratories do know how to measure a significant number of them.

II-2-5 PFAS and total PFAS: No specific comments other than to point out that some PFASs are considered as EDs, which is not stipulated in the draft text.

II-2-6 Uranium: This parameter should only be measured in geographical areas considered at risk due to local geological characteristics.

II-2-7 Microplastics: This concept appears in the text. Although this concern is very recent and has been the subject of considerable media coverage, the data are totally inadequate both in terms of hazard identification and toxicology and therefore risk characterisation. While this justifies the conducting of research programmes for knowledge acquisition, it does not yet justify including it in WIHC monitoring programmes.

Of particular concern is the publication of data showing a higher level of microplastics in recycled plastic bottles.

III- Regarding existing parameters, the limit value of which has been changed

Lead: The current situation does not allow the value of 10 µg/L to be guaranteed at all points of use, in particular due to the situation of pipes and accessories containing lead (pipes, alloys, welding, lead stearate in plastics, etc.) in indoor systems. No national or European incentive policy has been pursued for decades to encourage owners to eliminate them. Reducing the limit value to 5 µg/L makes the possibility of guaranteeing the conformity at each point of use in the current state of domestic systems in France even more illusory, or even utopian.

Interviews have confirmed that the choice of sampling sites for the health monitoring of the lead parameter is generally not guided by a rationale of representativeness of systems containing

lead, if it is indeed possible to define a representative framework of what a system made of lead, or other material likely to contain lead, actually can be within a municipality!

There is a risk of samples being taken on lead-free sites resulting in a distorted picture of compliance. Conversely, imposing the monitoring of systems containing lead would require the checking of the representativeness of the system, the confirming of the absence of recent work or operations conducive to further release, etc.

The aim of achieving a value of 5 µg/L within 10 years will require the implementation of an ambitious management policy which remains to be developed.

IV- Regarding removed parameters

While some parameters are removed, recital 19 p45 specifies that public information should necessarily include parameters such as iron and hardness, which justifies and confirms the interest of their measurement.

HCSP would like the requirement to measure the following parameters to be restored:

IV-1 Aluminium: This parameter is present in treatment products (coagulant/flocculant) and is an indicator of the treatment quality. It should be maintained because of the non-compliances that are currently detected on a regular basis, the health risks, particularly for renal dialysis, the formation of deposits in systems and concerns about the links between ingested aluminium and certain neurodegenerative diseases, even if they have not been confirmed by collective assessments.

IV-2 Iron: This parameter should be maintained because of the non-compliances that are currently detected on a regular basis, the formation of deposits in systems, and its contribution to the reduction of residual chlorine in systems, etc.

IV-3 Manganese: This parameter should be maintained because of the non-compliances currently detected on a regular basis, the formation of deposits in systems and confirmed health risks, particularly in the light of recent epidemiological data, with an assessment being finalised within Anses (French Agency for Food, Environmental and Occupational Health and Safety).

IV-4 TOC: This parameter should be maintained because of its link with microbial growth, the formation of chlorination by-products, the consumption of residual chlorine, etc.

IV-5 Sulphates: A health value has been defined for infants who constitute a population at risk. While it is not a value that should be measured at frequent intervals, given the fact that it varies little, it should be monitored.

V- Regarding parameters that have not been removed <u>despite WHO's request</u>

V-1 Mercury: As this does not seem to be a risk in mainland France, it does not seem useful to measure it other than to carry out a control measurement at widely spaced time intervals. This parameter should only be examined in areas considered at risk.

V-2 Benzene: As this does not seem to be a risk in France, it does not seem useful to measure it other than to carry out a control measurement at widely spaced time intervals, which remain to be defined from one area to another.

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VI- With regard to the general document, HCSP draws attention to:

VI-1: The monitoring programme: The minimum annual number of samples seems to imply daily sampling (365) for production units >10,000 m3 produced or distributed per day. This represents a significant additional cost and the requirement for analysis laboratories to be able to carry out all the analysis work over the weekend, even though this is justified for units of such size.

VI-2: A sensitive and by definition confidential defence discussion should be carried out in connection with the detection of terrorist risks.

VI-3: The case of indoor systems: While it is of interest to discuss the case of domestic systems, it is essential to take into account their major specificity, namely their hitherto unmeasured variability. Data can vary from one floor to another, from one building to another and from one house to another. The choice of the sampling site may thus prove to be totally unrepresentative. Sites that will always give guaranteed compliant results or, on the contrary, that will always be non-compliant are then easy to choose. As a result, health monitoring as practised does not, in most cases and for some parameters, fulfil its protective role, and the consequent costs are wasted as the results are of no use.

This question mark particularly concerns Lead, Chromium, total bacterial flora and legionella. A sampling strategy should be established to avoid, for example, lead being measured in lead-free systems!

Measuring legionella at all points of use is illusory and only doing so in a few public buildings is hardly representative. This parameter should thus be linked with an appropriate strategy.

P56 stipulates that the training of plumbers is required. Is France ready to finance this point and ensure that the results of the training are satisfactory?

VI-4 Natural mineral waters (NMS): While NMSs are excluded from the Directive, some of them, sold over-the-counter or available from public drinking fountains, may entail health risks for young children (sulphates, mineral content, manganese, etc.). Surveys conducted in France by ANSES have confirmed that a part of the population, even if only a small proportion, allows children to drink these waters and even sometimes for making up baby milk bottles. The texts concerned should therefore require consumers to be informed on labels of the type: "is not suitable for consumption by children less than X years old"

P13 stipulates that smaller suppliers will have more time to comply with their risk analysis approach: unfortunately, it is in these small units that the highest number of non-compliances is observed and priority and rapid assistance should be provided for these small units over and beyond the longer period granted to them.

VI-5 The lack of consideration given to variability in measurements: The results of any chemical measurement, physical measurement or enumeration of micro-organisms are subject to variability associated in particular with sampling, the analytical technique and operator analysis. The assessment of toxicological reference values and risk characterisation are carried out with uncertainty factors so as to ensure safety even when limit values are slightly exceeded. Given this reality, continuing to impose a limit value without a validity interval often results in management restrictions which are often costly for very slight temporary exceedances. This is sometimes the case for pesticides with slight exceedances of 0.01 or 0.02 µg/L properly included in the measurement variability.

A limit value should therefore be established with a numerical interval that assists interpretation.

VI-6 Tailor analytical programmes to local situations: While some parameters may be removed, an acceptable number of such parameters should be defined and those parameters that cannot be removed should be clearly specified.

As there are significant territorial inequalities in water quality, the risk analysis approach is essential and must make it possible to add or remove certain parameters depending on the specificity of an area.

VI-7 Consumer information: Such consumer information should be improved to better reflect the reality in terms of the variability in results. These annual scores provided to consumers do not always show all parameters and are limited to an annual average. However, the proposed including of certain parameters or very low values (e.g. lead) will only give rise to unnecessary concern among consumers about the water supplied to their taps and encourage them to only consume packaged water, which would have the opposite effect to the aim of this revision of the Directive.

Article 14 p62 calls for at least annual information but does not require any details of results, including variability, to be given.

Article 15 p64 calls for information on incidents to be given only if they last longer than 10 days. Any significant incident should be reported even if it does not last as long.

VII- Regarding certain articles for which comments are made

Article 2: This article refers to bottled spring water, which does not take into account water made "drinkable by treatment and packaged" and packaging in containers or sachets. Reference should therefore be made to all packaged waters. The use of the term "packaged" would avoid having to detail the type of packaging. This also concerns Article 6 c). It should be noted that based on the free movement argument, it has not been possible to ban the distribution of polycarbonate bottles, releasing BPA, which is one of the "worst case" scenarios for a pregnant woman consuming only this type of water in the home as highlighted in the European Scenhir Committee report on the BPA risk.

Article 7 - 1 (b) and 2 p53: the term hazard "identification" should be used rather than hazard "assessment"

The same applies to the title of **Article 8**

Article 17 1c p65: the wording refers to scientific, analytical and epidemiological data suggesting that epidemiology does not fall into the scientific category, which is an error.

VIII- Typographical and drafting errors

VIII-1 The terms "risks" and "hazards" are not always used correctly.

A "potential hazard" is often mentioned, as for example in recital 2 p33: a hazard cannot be potential. A risk is a probability. The sentence in this example thus describes "micro-organisms, parasites and substances" as "potential hazards" rather than a "potential risk". Another example is in Article 15 1d, where incidents have been "the cause of potential hazards" even though they are risks.

Recital 9: "hazard assessment": "hazard identification" would be more appropriate.

Recital 15: "..failure to comply with the minimum requirements…. should be considered…. As a potential hazard…. ». This is more a risk in this case

Recital 5 p36: "parametric values" described as "feasible". A value is not feasible. Complying with this value may be referred to as feasible.

VIII-2 The word "substance" is the wrong French translation of the English word “substance”. In French, molecules, metals, ions or elements are referred to in chemistry – “substance” does not mean anything. It may be possible to use it exceptionally as a generic term, but referring to lead substance, for example, is not acceptable.

VIII-3 A capital L should be used for litres

VIII-4 The number in volume units should be written as an exponent (m^3) (on p49, for example)

VIII-5 In the Annexes to the Proposal for a Directive, on p. 20, the analytical method for measuring *P. aeruginosa* is indicated even though it is not one of the parameters to be monitored

Opinion drafted by a group of experts, members of HCSP, and outside personalities based the specialized "Environmental risks" Commission (CSRE). No conflict of interest was identified.

An electronic vote was held by CSRE on 26 March 2018: 13 qualified members out of 18 qualified voting members voted, 0 conflicts of interest, text approved by 13 voters, 0 abstentions, 0 votes against.

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Annexes

Annex 1: List of the members of the Working Group set up to respond to this referral

Claude Casellas, University of Montpellier

Nathalie Garrec, HCSP, CSRE

Philippe Hartemann, Laboratoire national Luxembourg

Yves Lévi, HCSP, CSRE (Working Group Leader)

Jean-Louis Roubaty, HCSP, CSRE

Fabien Squinazi, HCSP, CSRE

HCSP General secretariat:

Gabrielle Vernouillet, CSRE coordinator

The working group met on 23 February, and 14 and 21 March 2018.

Annex 2: List of people interviewed on 23 February 2018, by structure

Professional Federation of Water Companies (FP2E):

- Tristan Mathieu: FP2E General Delegate
- Fabrice Nauleau: SAUR Technical Director
- Jean François Loret: Director, Environment and Health Department, Suez
- Chiara de Leonardis: FP2E European Issues Officer
- Sarah Hercule Bobroff, DT performance, Veolia Environnement

ARS Normandie:

- Raphael Tracol: Health engineering engineer, responsible for the health and environment centre

ARS Pays de Loire:

- Patrick Peigner: Health engineering engineer, manager of the department of health and safety of individuals and the environment within the Maine et Loire territorial delegation

Roannaise de l'eau

- Pascal Petit, Technical Head

Annex 3: File contents

HCSP worked on the basis of the following items:

- Council of the European Union: Interinstitutional file 2017/0332 (COD) dated 2 February 2018, entitled "Proposal for a Directive of the European Parliament and the Council on the quality of water intended for human consumption (recast), COM (2017) 753 Final and its Annexes 1 to 6.
- Samples taken from the Siseau database by DGS at HCSP's request
- WHO: European Regional Office: Drinking water parameter Cooperation Project, Bonn, 11 Sept. 2017

Annex 4: Referral to the French Health Authority (DGS) by letter dated 20 February 2018

[redacted]

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RÉPUBLIQUE FRANÇAISE

Ministère des Solidarités et de la anté	Ministère de la Transition écologique et solidaire	Ministère du Travail
Direction générale de la santé	Direction générale de la prévention des risques	Direction générale du travail

Paris le - 4 JUIL. 2017

Le Directeur général de la prévention des risques
Le Directeur général de la santé
Le Directeur général du travail

à

Monsieur le Président du Haut Conseil de la santé publique (HCSP)

Objet : Demande de recommandations du HCSP en matière de protection des populations potentiellement exposées autour des sites industriels manipulant du dioxyde de titane (TiO_2).

PJ : Etude de l'Institut national de l'environnement industriel et des risques (INERIS) sur les mesurages atmosphériques en TiO_2 à proximité d'un site industriel.

Monsieur le Président du Haut Conseil de la santé publique,

L'analyse de la base de données R-Nano[1] indique que de nombreux sites en France manipulent le TiO_2 sous forme nanométrique. Ces manipulations peuvent être à l'origine d'exposition des travailleurs mais également d'émissions à l'extérieur des sites (rejets canalisés, rejets diffus, envols de poussière, ré-envol de matières déposées pendant les périodes précédentes) et d'exposition des populations.

De plus, le Centre international de recherche sur le cancer a classé le TiO_2 sous forme de particules respirables en cancérogène possible par inhalation. L'Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail (Anses) a porté auprès de l'agence européenne des produits chimiques une demande similaire de classification dans le cadre du règlement européen (CE) n°1272/2008 « CLP », relatif à la classification, à l'étiquetage et à l'emballage des substances et des mélanges dangereux.

[1] Décret n° 2012-232 du 17 février 2012 et https://www.r-nano.fr/

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Plusieurs agences sanitaires en Europe et dans le monde ont publié des avis soulignant la nécessité de renforcer la traçabilité des nanomatériaux, la surveillance de leurs effets voire d'encadrer ou de restreindre leur utilisation. Parmi ces avis, le National Institut of Occupational Safety and Health (NIOSH) a publié des recommandations de valeurs maximales de concentration pour l'exposition des travailleurs à certaines substances à l'état nanoparticulaire. En France, l'ANSES a émis plusieurs recommandations et l'Institut national de recherche et de sécurité (INRS) poursuit plusieurs études sur l'identification et la prévention des expositions professionnelles, en particulier sur le TiO_2 nanométrique.

Suite à une étude conduite par l'INERIS visant à l'élaboration d'une valeur repère pour l'exposition des populations riveraines des sites manipulant du dioxyde de titane à l'échelle nanométrique (cf. PJ), les directions générales souhaitent que le Haut-Conseil de la santé publique puisse émettre des recommandations sur les mesures de gestion à mettre en œuvre vis-à-vis des populations riveraines de sites manipulant du TiO_2 à l'échelle nanométrique ainsi que des travailleurs. Sans être limitatif, ces recommandations pourront couvrir l'ensemble des mesures préventives et curatives relatives à cette gestion : rappels des bonnes pratiques, des conditions de confinement et de configuration des mesures d'aération-assainissement ; information des populations ; dépistage ; élaboration d'une ou plusieurs valeur-seuil qui déclencheraient elles-mêmes des actions d'information, de dépistage, de réduction des activités voire de fermeture du site si les niveaux de contamination sont tels qu'aucune autre solution n'est envisageable.

Ces recommandations pourront s'appuyer sur toutes les informations disponibles et en particulier les développements en cours dans le cadre des réglementations européennes, ainsi que les études de l'Institut national de recherche et de sécurité (INRS) et du réseau des préventeurs des Caisses d'assurance retraite et de la santé au travail (CARSAT).

Les directions générales souhaitent également que ces recommandations incluent les critères justifiant la mise en place éventuelle d'une surveillance sanitaire ou d'actions de dépistage.

Les directions générales souhaitent disposer de ces recommandations pour fin 2017.

Nous vous prions d'agréer, Monsieur le Président, l'expression de nos salutations les meilleures.

Le Directeur général de la prévention des risques

Le Directeur général de la santé

Professeur Benoît VALLET

Le Directeur général du travail

Yves STRUILLOU

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