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**Promotion et protection de tous les droits de l'homme,
civils, politiques, économiques, sociaux et culturels,
y compris le droit au développement**

Rapport du Rapporteur spécial sur les incidences sur les droits de l'homme de la gestion et de l'élimination écologiquement rationnelles des produits et déchets dangereux*

Note du secrétariat

Le secrétariat a l'honneur de transmettre au Conseil des droits de l'homme le rapport du Rapporteur spécial sur les incidences sur les droits de l'homme de la gestion et de l'élimination écologiquement rationnelles des produits et déchets dangereux, établi en application de la résolution 36/15 du Conseil.

Conformément à son mandat, dans le présent rapport, le Rapporteur spécial examine la situation des travailleurs concernés qui sont affectés par leur exposition à des produits toxiques et autres substances dangereuses au travail dans le monde entier. Il propose des principes destinés à aider les États, les entreprises et d'autres parties prenantes à respecter les droits des travailleurs et à protéger ces derniers de l'exposition à des substances toxiques au travail et à leur assurer des recours en cas de violation de leurs droits.

* L'annexe au présent document est reproduite telle qu'elle a été reçue, dans la langue de l'original seulement.



Rapport du Rapporteur spécial sur les incidences sur les droits de l'homme de la gestion et de l'élimination écologiquement rationnelles des produits et déchets dangereux

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I. Introduction

1. Toute personne a droit à des conditions équitables et satisfaisantes de travail¹. Chaque travailleur a droit à la dignité et à un traitement éthique respectueux et le droit de ne pas être soumis à des conditions de travail déshumanisantes ou dégradantes. Les États se sont fixé un objectif ambitieux dans le cadre des objectifs de développement durable (ODD) : garantir un travail décent à chacun d'ici à 2030².

2. Malgré les obligations claires concernant la protection de leur santé, les travailleurs du monde entier se retrouvent au cœur d'une crise de santé publique en raison de leur exposition à des substances dangereuses dans le cadre de leur travail. Si l'Organisation mondiale de la santé (OMS), l'Organisation internationale du Travail (OIT) et d'autres parties demandent depuis des dizaines d'années que des mesures soient prises pour faire face à cette crise, l'attention accordée au problème mondial de l'exposition des travailleurs à des substances dangereuses demeure insuffisante.

3. Selon les estimations, un travailleur meurt toutes les 15 secondes de son exposition à des produits toxiques au travail³ et plus de 2 780 000 travailleurs dans le monde meurent chaque année à cause de conditions de travail dangereuses ou insalubres⁴. Les maladies professionnelles sont à l'origine de 2,4 millions de décès prématurés (plus de 86 % du total)⁵. Une « maladie professionnelle » est une maladie contractée principalement suite à une exposition à des facteurs de risques liés à l'activité professionnelle, notamment l'exposition chronique à des produits chimiques industriels toxiques, à des pesticides et d'autres produits chimiques, à des radiations et à de la poussière⁶. Environ 160 millions de cas de maladie professionnelle sont déclarés chaque année⁷. Le coût de l'inaction des États et des entreprises face à cette crise mondiale de santé publique est estimé à environ 4 % du produit intérieur brut mondial soit presque 3 000 milliards de dollars des États-Unis⁸.

4. Les cancers représentent plus de 70 % des maladies professionnelles dans le monde et on estime qu'ils entraînent la mort d'au moins 315 000 personnes chaque année⁹ ; 5,3 à 8,4 % de tous les cancers et 17 à 29 % des décès dus à un cancer du poumon chez les hommes sont le fait de l'exposition à des substances toxiques au travail¹⁰. Presque tous ces cancers peuvent être évités¹¹. Plus de 200 facteurs différents, notamment les produits chimiques toxiques et les radiations, ont été répertoriés à ce jour comme des substances

¹ Déclaration universelle des droits de l'homme, art. 23.

² Voir OIT, « Travail décent et Programme de développement durable pour 2030 », 2 novembre 2017. Les mécanismes des droits de l'homme des Nations Unies définissent le « travail décent » comme un travail qui « respecte les droits fondamentaux de la personne humaine ainsi que les droits des travailleurs concernant les conditions de sécurité au travail et de rémunération », Comité des droits économiques, sociaux et culturels, observation générale n° 18 sur le droit au travail (2005).

³ Päivi Hämäläinen, Jukka Takala et Tan Boon Kiat, *Global Estimates of Occupational Injuries and Work-related Illnesses 2017* (Singapour, Workplace Safety and Health Institute).

⁴ Ibid.

⁵ Ibid.

⁶ OMS, « Occupational and work-related diseases » (n. d.).

⁷ Confédération syndicale internationale, « Travail toxique : Stop aux expositions mortelles aujourd'hui ! », 13 avril 2015.

⁸ Gerry Eijkemans, « The importance of workers' health to advance the United Nations Sustainable Development Agenda », *Occupational & Environmental Medicine*, vol. 75, Supp. 2 (avril 2018) ; OIT, « Global action needed to tackle rising work-related injuries and diseases, ILO says », 7 septembre 2017.

⁹ OIT, *Promouvoir le travail décent dans l'industrie chimique : Initiatives novatrices* (Genève, 2013), p. 26.

¹⁰ Jukka Takala et consorts, « Eliminating occupational cancer in Europe and globally », OSHWiki, 30 mai 2017.

¹¹ Ibid.

cancérigènes connues ou probables et les travailleurs sont exposés à nombre d'entre elles dans le cadre de leur travail¹².

5. Les travailleurs exposés à des matières toxiques souffrent de maladies respiratoires débilantes ou mortelles, de troubles neurologiques et d'altérations des fonctions procréatrices, comme l'infertilité et l'impossibilité de mener une grossesse à terme, entre autres effets sur leur santé. L'exposition à des substances toxiques au travail est à l'origine de 12 % des décès dus à la bronchopneumopathie chronique obstructive et on estime que 29 000 décès supplémentaires sont le fait des maladies professionnelles que sont la silicose, l'amiantose et la pneumoconiose¹³.

6. Du fait des rôles différents que la société leur attribue, notamment en ce qui concerne la vie professionnelle et les tâches ménagères, les femmes et les hommes ne sont pas exposés de la même manière aux produits chimiques toxiques pour ce qui est, entre autres, du type de substance en cause et du degré d'exposition. La sensibilité aux effets de l'exposition varie selon le sexe en raison de différences biologiques entre hommes et femmes, telles que des différences physiologiques ou hormonales¹⁴. Par exemple, les femmes tendent à stocker des niveaux plus élevés de matières polluantes dans leurs tissus adipeux que les hommes. Pendant la grossesse, l'allaitement et la ménopause, le corps féminin subit des changements qui peuvent accroître sa sensibilité aux effets sur la santé de l'exposition à des substances toxiques.

7. L'exposition des travailleuses en âge de procréer à des produits chimiques toxiques est particulièrement préoccupante. Il n'est pas suffisant de protéger uniquement les femmes enceintes car un fœtus en développement peut pâtir de l'exposition qui survient avant que la grossesse ne soit détectée. Des effets nocifs sur la santé, particulièrement chez la femme enceinte et le fœtus, mais également chez les travailleurs en général, sont observés pour des taux d'exposition extrêmement bas. Tandis que les preuves de ces effets s'accumulent, les taux d'exposition « sans danger » sont en permanence revus à la baisse et des enfants continuent de naître avec toutes sortes de problèmes de santé, liés en particulier à l'exposition des mères à des produits chimiques toxiques au cours de leur grossesse (A/HRC/33/41)¹⁵.

8. Les statistiques officielles ont tendance à sous-estimer l'ampleur du problème. Par exemple, l'incidence de l'exposition est fortement sous-évaluée dans certains contextes et dans certains pays¹⁶. Étant donné qu'ils s'appuient sur les données reçues, les statistiques officielles révéleront peut-être une incidence des maladies professionnelles plus élevée dans un pays avancé comme la Finlande que dans un pays comme l'Inde, pour la simple raison qu'il y est plus aisé de diagnostiquer et de reconnaître les maladies causées par l'exposition à des substances toxiques travail. Par ailleurs, certains pays n'ont pas de définition légale ou de liste de référence des maladies professionnelles permettant de faire état plus facilement de l'incidence des maladies et des décès résultant de causes particulières. Les maladies professionnelles les plus répandues, telles que la bronchopneumopathie chronique obstructive, peuvent ne pas être reconnues correctement et sont souvent sous-diagnostiquées comme telles¹⁷. De plus, et ce fait est important, les statistiques nationales ne prennent souvent pas en compte les travailleurs indépendants, les paysans pratiquant une agriculture de subsistance et les travailleurs du secteur informel. Ces derniers constituent une part importante des travailleurs dans le monde et représentent la majorité des travailleurs de certains pays, dont les plus grands et les plus peuplés se situent dans des régions moins développées¹⁸. Puisque nombre de pays n'ont pas suffisamment de moyens

¹² OMS, Centre international de recherche sur le cancer, « IARC monographs on the evaluation of carcinogenic risks to humans », 29 juin 2018. Disponible à l'adresse <https://monographs.iarc.fr/fr/agents-classes-par-les-monographies-du-circ-2/>.

¹³ OMS, *Global Health Risks: Mortality and Burden of Disease Attributable to Selected Major Risks* (Genève, 2009), p. 25.

¹⁴ Programme des Nations Unies pour le développement (PNUD), *Chemicals and Gender*, 2011.

¹⁵ Voir aussi OMS, *Summary of Principles for Evaluating Health Risks in Children Associated with Exposure to Chemicals* (Genève, 2011).

¹⁶ OIT, « World Statistic: The enormous burden of poor working conditions » (n. d.).

¹⁷ Hämäläinen, p. 17.

¹⁸ Ibid., p. 7.

pour recueillir des informations sur les causes de décès, les données concernant les maladies et les décès reposent sur des estimations.

9. Pratiquement tous les secteurs sont concernés par cette crise sanitaire, y compris le secteur public et le secteur privé, ainsi que les entreprises les plus puissantes du monde sur le plan économique. Nombre d'entre elles ont, du fait de leur organisation propre, de gigantesques chaînes d'approvisionnement opaques et entretiennent même des liens avec le secteur informel. Certaines de ces entreprises ne sont pas clairement impliquées, comme c'est le cas par exemple pour une institution financière qui commercialise de l'or extrait au mercure toxique, activité ayant de graves effets sur la santé des travailleurs du secteur informel et de leurs enfants. Quelques cas traités par le Rapporteur spécial au cours des dernières années figurent à l'annexe au présent rapport.

10. Dans son rapport, le Rapporteur spécial analyse les droits de l'homme des travailleurs concernés qui sont affectés par leur exposition à des produits chimiques toxiques et autres substances dangereuses (matières toxiques) au travail¹⁹, avant de résumer les problèmes que doivent actuellement surmonter les travailleurs dans le cadre de l'économie mondiale. Le Rapporteur spécial propose en conclusion des principes visant à assurer le respect et la protection des droits des travailleurs exposés à des substances toxiques au travail et à leur garantir des recours utiles en cas de violation de ces droits ou d'atteintes qui leur seraient portées.

11. Aux fins du présent rapport, le terme « travailleurs » désigne non seulement les travailleurs employés directement par une entreprise, mais aussi les travailleurs informels, ainsi que les travailleurs contractuels, les sous-traitants, les travailleurs intérimaires et toute autre personne exerçant un travail ou des activités liées au travail.

12. Depuis plus de vingt ans, les organes des droits de l'homme de l'ONU nomment un rapporteur spécial qui est chargé d'examiner les incidences sur les droits de l'homme de l'exposition à des substances dangereuses et à des déchets toxiques dans de nombreux secteurs d'activité à travers le monde et de faire rapport sur ces incidences, notamment en ce qui concerne les travailleurs.

13. Le présent rapport s'inscrit dans le cadre des efforts constants de l'actuel titulaire du mandat pour faire en sorte que les droits de l'homme fassent partie intégrante des discussions sur la sécurité et la santé du travail aux niveaux national et international. Le Rapporteur spécial est convaincu que l'importance du problème a été en grande partie ignorée et reléguée au second rang des priorités des instances internationales concernées, d'où le peu de progrès observé à l'échelle mondiale dans la lutte contre ce phénomène de plus en plus préoccupant.

II. Droits de l'homme des travailleurs et exposition à des substances toxiques

14. Les droits des travailleurs sont des droits de l'homme et inversement. Ces droits sont étroitement liés, indissociables et universels. Ce sont, notamment, des droits civils, politiques, économiques, sociaux et culturels. Nul ne peut en être privé en raison du travail qu'il exerce.

15. Les travailleurs sont particulièrement vulnérables aux violations des droits de l'homme et aux atteintes à ces droits, en particulier lorsqu'ils sont exposés à des substances toxiques dans le cadre de leur travail. Les dommages causés par l'exposition chronique sont

¹⁹ Conformément aux précédents rapports du Rapporteur spécial actuellement en fonction et de ses prédécesseurs, les substances et déchets dangereux ne sont pas strictement définis ; en font notamment partie les produits chimiques industriels et pesticides toxiques, les polluants, les contaminants, les substances explosives et radioactives, certains additifs alimentaires et diverses formes de déchets. Par souci de clarté, le Rapporteur spécial emploie les mots de « substances toxiques » les produits et déchets dangereux pour désigner, mais cette dénomination, telle qu'utilisée dans le présent rapport, couvre également des substances et des déchets qui sans être toxiques sont dangereux.

souvent invisibles et ses effets indésirables sur la santé peuvent mettre des années, voire des décennies, pour se manifester chez les travailleurs ou leurs enfants. Il est essentiel de prévenir l'exposition à des matières toxiques afin de protéger les droits de l'homme, ainsi que les droits des travailleurs.

A. Droit à des conditions de travail sûres et salubres

16. Le droit à des conditions équitables et satisfaisantes de travail, énoncé à l'article 23 de la Déclaration universelle des droits de l'homme et à l'article 7 du Pacte international relatif aux droits économiques, sociaux et culturels, comprend le droit à des conditions de travail sûres et salubres. En énonçant séparément ce droit, le Pacte reconnaît et met en évidence la vulnérabilité des travailleurs face aux violations de leurs droits et aux atteintes à ceux-ci. Cette vulnérabilité renforce les obligations des États et autres parties pour ce qui est de prévenir l'institutionnalisation de l'exploitation des travailleurs liée au travail dangereux.

17. Le droit à des conditions de travail sûres et salubres est un droit en soi, mais il englobe également nombre d'autres droits de l'homme étroitement liés et interdépendants, notamment les droits décrits ci-après.

18. Toute personne, y compris les travailleurs des secteurs formel et informel, a un droit inhérent à la vie²⁰ et un droit de jouir du meilleur état de santé physique et mentale qu'elle soit capable d'atteindre²¹. Il est clairement fait obligation aux États d'adopter des mesures préventives de protection tant du droit à la vie²² que du droit à la santé, en plus de dispositions pour des « conditions de travail hygiéniques »²³.

19. Le Comité des droits économiques, sociaux et culturels précise que les États ont le devoir d'améliorer tous les aspects de l'hygiène du travail. Il s'agit notamment de « mesures de prévention contre les accidents du travail et les maladies professionnelles [...] [et de] mesures visant à empêcher et réduire l'exposition de la population à certains dangers tels que radiations ou produits chimiques toxiques [...] ayant une incidence directe sur la santé des individus »²⁴.

20. Toute personne, y compris les travailleurs, a le droit à l'intégrité physique²⁵. Ce droit comprend le droit de chacun à l'autonomie et à l'autodétermination en ce qui concerne son corps, notamment son exposition à des substances toxiques indésirables, que ce soit dans le cadre de son travail ou ailleurs. Les empoisonnements graves et autres expositions extrêmes à des substances toxiques constituent incontestablement des cas de violation du droit des travailleurs à l'intégrité physique car ils les exposent à des traitements violents, cruels, inhumains ou dégradants. Cependant, ce droit s'étend également à l'exposition à plus long terme à des substances toxiques, qui peut aussi s'accompagner de traitements violents, cruels, inhumains ou dégradants (A/HRC/22/53 et A/HRC/33/41).

21. Par ailleurs, les travailleurs ont le droit de ne pas être soumis sans leur libre consentement à une expérience scientifique²⁶. L'exposition des travailleurs à des substances potentiellement cancérigènes ou dangereuses pour un fœtus en développement sans qu'ils en soient suffisamment informés, alors qu'ils pourraient disposer d'informations à ce sujet ou être en mesure d'y accéder, soulève des préoccupations quant au fait que des travailleurs ont été et continuent d'être soumis à des expériences sur l'être humain. Ce droit met en

²⁰ Pacte international relatif aux droits civils et politiques, art. 6.

²¹ Pacte international relatif aux droits économiques, sociaux et culturels, art. 12.

²² Comité des droits de l'homme, observation générale n° 6 (1982) sur le droit à la vie.

²³ Comité des droits économiques, sociaux et culturels, observation générale n° 14 (2000) sur le droit au meilleur état de santé susceptible d'être atteint.

²⁴ Ibid.

²⁵ Parmi ces droits fondamentaux figure le droit au respect de l'intégrité physique et mentale du travailleur dans l'exercice de son activité professionnelle. Comité des droits économiques, sociaux et culturels, observation générale n° 18.

²⁶ Pacte international relatif aux droits civils et politiques, art. 7.

évidence l'importance du droit à l'information pour la réalisation des droits de l'homme des travailleurs.

22. Au titre du droit à des conditions de travail sûres et salubres, l'exposition des travailleurs à des substances toxiques sans leur consentement préalable en connaissance de cause et sans qu'il leur soit réellement permis de refuser d'exercer l'activité dangereuse, devrait être reconnue comme une violation de leurs droits et une atteinte à ceux-ci. Il s'agit d'un aspect essentiel du droit de tout travailleur d'être protégé de conditions de travail qui ne soient pas sûres et salubres. Le Rapporteur spécial estime que tout travailleur a un droit inhérent de ne pas être exposé à des substances toxiques sans son consentement préalable en connaissance de cause. Selon lui, ce droit est au cœur du droit à l'intégrité physique, du droit à l'information et du droit de ne pas être soumis sans son libre consentement à une expérience scientifique.

23. La Convention (n° 187) sur le cadre promotionnel pour la sécurité et la santé au travail (2006) de l'OIT reconnaît le droit des travailleurs à des conditions de travail sûres et salubres, bien que l'OIT ne considère pas ce droit comme un « droit fondamental au travail ». L'OIT reconnaît implicitement le droit des travailleurs de ne pas être exposés à des substances toxiques sans leur consentement préalable en connaissance de cause en reconnaissant le droit des travailleurs « de s'écarter du danger résultant de l'utilisation de produits chimiques lorsqu'ils ont un motif raisonnable de croire qu'il existe un risque imminent et sérieux pour leur sécurité ou leur santé »²⁷. L'OIT a émis des recommandations à ce sujet aux États portant, par exemple, sur la mise en place de politiques, systèmes et programmes nationaux de prévention « des lésions et maladies professionnelles et des décès [...] pour la protection de tous les travailleurs, en particulier les travailleurs dans les secteurs à haut risque ainsi que les travailleurs vulnérables, tels que ceux de l'économie informelle, les travailleurs migrants et les jeunes travailleurs »²⁸.

B. Droit à l'information, droit de participer et droit d'association

24. Toute personne, y compris les travailleurs, dispose des droits inaliénables à la liberté d'expression, de réunion et d'association, notamment de la liberté de s'affilier à un syndicat et de constituer des syndicats et du droit à l'information²⁹.

25. Le droit à l'information est le fondement de l'exercice des droits des travailleurs dans le contexte de l'exposition à des substances toxiques. Comme cela a été indiqué plus haut, le droit à l'information est indissociable du droit des travailleurs de ne pas être exposés à des substances toxiques sans leur consentement préalable en connaissance de cause. Les travailleurs ont le droit de connaître, entre autres choses, les incidences de leur exposition, les actions mises en place pour la prévenir et leurs droits en la matière.

26. Il est nécessaire de mettre en place des mécanismes publics pour collecter, mesurer, contrôler, communiquer et vérifier les informations sur les dangers et les taux d'exposition afin d'estimer et d'analyser les incidences sur la santé et d'assurer l'application du principe de responsabilité. Il est nécessaire de tenir à jour des données ventilées, exactes et complètes afin de comprendre les faits particuliers et de connaître précisément l'incidence de certaines activités sur ces différents travailleurs de même que sur les autres groupes exposés, notamment les enfants, les femmes en âge de procréer, les travailleurs migrants et leur famille, les personnes âgées et les personnes handicapées.

27. Les conventions de l'OIT reconnaissent plusieurs aspects du droit des travailleurs (et de leurs représentants) à l'information, des obligations faites aux États et des responsabilités de l'entreprise de l'employeur, notamment celles des fournisseurs de

²⁷ Convention (n° 170) sur les produits chimiques, 1990, art. 18.

²⁸ Recommandation (n° 197) sur le cadre promotionnel pour la sécurité et la santé au travail, 2006 ; voir également la Constitution de l'OIT.

²⁹ Déclaration universelle des droits de l'homme, art. 24 ; Pacte international relatif aux droits civils et politiques, art. 19, 22 et 25 ; Convention internationale sur la protection des droits de tous les travailleurs migrants et des membres de leur famille, art. 26.

produits chimiques³⁰. Par exemple, les travailleurs concernés et leurs représentants ont le droit d'obtenir « des informations sur l'identification des produits chimiques utilisés au travail, les propriétés dangereuses de ces produits, les mesures de précaution à prendre, l'éducation et la formation »³¹. Cependant, si elle préconise la classification des produits chimiques selon le danger potentiel pour la santé qu'ils représentent (art. 6), la Convention sur les produits chimiques requiert uniquement des fournisseurs qu'ils évaluent les propriétés de ces matières « sur la base des informations disponibles » (art. 9, par. 3). La Convention ne leur demande donc pas de mener des analyses pour produire les informations manquantes nécessaires à une telle classification.

28. Toutes les informations concernant la santé et la sécurité détenues par les organismes publics et les entreprises devraient pouvoir être divulguées à moins que certaines restrictions limitées ne soient justifiées par l'intérêt général, comme la protection de la vie privée ou la santé publique (voir A/HRC/30/40, par. 38 et 101 b)). Le refus des États ou des entreprises de divulguer des informations concernant la santé ou la sécurité en faisant valoir qu'elles sont confidentielles et en particulier que cela aurait des incidences négatives sur les bénéfices ou la compétitivité n'est jamais légitime (ibid., par. 42). Dans cet esprit, les accords internationaux sur les produits chimiques toxiques ont spécifié à de nombreuses reprises que les informations sur les matières toxiques concernant la santé ou la sécurité ne sont pas considérées comme confidentielles³².

29. Pour les travailleurs qui défendent leur droit à des conditions de travail sûres et salubres, entre autres droits, le nombre fait la force. La protection vigoureuse du droit d'organisation, notamment du droit de constituer des syndicats, du droit à la liberté d'association et à la négociation collective s'est avérée efficace pour renforcer la protection des travailleurs contre l'exposition à des substances toxiques ainsi qu'à d'autres risques. Par exemple, la mobilisation des syndicats a permis d'interdire progressivement le tabac dans les lieux fermés. Ces droits sont consacrés par les conventions de l'OIT et sont considérés comme des droits fondamentaux au travail.

C. Droits des travailleurs exposés à un risque accru

30. Les travailleurs, comme tous les êtres humains, naissent libres et égaux en droits³³. Souvent, ce sont les personnes qui vivent dans des situations qui les marginalisent et les rendent vulnérables aux violations de leurs droits qui pâtissent de l'exposition à des substances toxiques. Pourtant, chacun a droit à la protection contre la discrimination et à l'égalité de traitement devant la loi. Aucun travailleur ou enfant de travailleur ne devrait avoir à supporter le fardeau d'une maladie professionnelle ou d'un handicap pouvant résulter d'une discrimination fondée sur l'âge, le revenu, la race, la religion, le sexe, le pays d'origine, l'intelligence, les opinions politiques ou toute autre distinction.

1. Droits de l'enfant et des femmes

31. Tout enfant a le droit de ne pas être astreint aux pires formes de travail des enfants. Les travaux dans lesquels des enfants utilisent des pesticides, des produits chimiques industriels toxiques, des métaux ou d'autres substances dangereuses ou y sont exposés d'une autre manière constitue l'une des pires formes de travail des enfants (A/HRC/33/41). La Convention relative aux droits de l'enfant reconnaît le droit de l'enfant de n'être astreint à aucun travail comportant des risques ou susceptible de nuire à sa santé ou à son développement physique (art. 32). La Convention (n° 182) de 1999 sur les pires formes de

³⁰ Convention sur les produits chimiques, art. 18 ; Convention (n° 174) sur la prévention des accidents industriels majeurs, 1993, art. 20 ; Convention (n° 176) sur la sécurité et la santé dans les mines, 1995, art. 13, par. 1 c), et Convention (n° 184) sur la sécurité et la santé dans l'agriculture, 2001, art. 8, par. 1 a).

³¹ Convention sur les produits chimiques, art. 18, par. 3.

³² Convention de Stockholm sur les polluants organiques persistants, art. 9 ; Convention de Minamata sur le mercure, art. 17. Voir aussi la Déclaration de Dubaï sur la gestion internationale des produits chimiques.

³³ Déclaration universelle des droits de l'homme, art. 1.

travail des enfants identifie comme la pire forme de travail des enfants « Les travaux qui, de par leur nature ou les conditions dans lesquelles ils s'exercent, sont susceptibles de nuire à la santé, à la sécurité ou à la moralité de l'enfant » (art. 3). Exposer les enfants à des substances toxiques au travail est indéfendable.

32. La protection de la santé génésique contre les risques inhérents à des conditions de travail dangereuses est une obligation fondamentale des États dans l'optique de l'élimination de la discrimination à l'égard des femmes dans le domaine de l'emploi³⁴. Les travailleuses ont droit à une protection spéciale pendant toutes les périodes qui présentent des risques pour leur procréation³⁵, ainsi que pour leur progéniture, ce qui exige une protection contre les risques liés aux activités qui les exposent ou exposent leur fœtus à des produits chimiques toxiques.

33. Les femmes ne devraient pas pour autant être privées de l'égalité des chances en matière d'emploi ou de revenu. Particulièrement préoccupant est le fait que les travailleuses sont exposées à des substances toxiques au travail avant et pendant les premiers stades de la grossesse, avant même qu'elles ne sachent qu'elles sont enceintes. Cette réalité exige une attention particulière de la part des États et des entreprises de façon à protéger la santé génésique des femmes en empêchant qu'elles ne soient exposées à des substances toxiques sans pour autant restreindre leur emploi de manière discriminatoire. Le meilleur moyen d'y parvenir est d'éliminer les substances toxiques au travail.

2. Droits des travailleurs migrants et des travailleurs handicapés

34. L'interdiction de la discrimination raciale s'applique sous toutes ses formes. Ni la race ni l'appartenance ethnique ne devrait empêcher l'exercice par les travailleurs du droit à des conditions de travail sûres et salubres³⁶. Les travailleurs migrants, qu'ils soient en situation régulière ou non, ont droit à l'égalité et à l'égalité de traitement avec les nationaux en ce qui concerne la sécurité et l'hygiène et d'autres conditions de travail³⁷. Les personnes handicapées ont le droit de bénéficier, sur un pied d'égalité avec les autres, de conditions de travail sûres et salubres et des droits de l'homme connexes³⁸.

D. Droit à un recours utile

35. L'obligation de rendre des comptes est un principe fondamental des droits de l'homme. Les États et les autres débiteurs d'obligations doivent être responsables devant les travailleurs, entre autres titulaires de droits, du respect des obligations en matière de droits de l'homme. Le droit à un recours utile est indissociable du droit à l'information, vu que l'accès à des recours utiles en cas d'exposition à des substances toxiques dépend de la disponibilité et de l'accessibilité de certaines informations concernant ces substances et les conditions de travail (A/HRC/30/40).

36. Tout travailleur victime d'une atteinte à ses droits ou d'une violation de ses droits a droit à un recours utile³⁹. Les recours utiles contre les violations des droits des travailleurs résultant de l'exposition à des substances toxiques comprennent le droit des victimes à une restitution, une indemnisation, une réhabilitation, une satisfaction rapide et à des garanties de non-répétition, ainsi que le droit à ce que les auteurs de violations des droits soient

³⁴ Convention sur l'élimination de toutes les formes de discrimination à l'égard des femmes, art. 11, par. 1 f).

³⁵ Ibid., art. 11 par. 2 d).

³⁶ Convention internationale sur l'élimination de toutes les formes de discrimination raciale, art. 5 d) i).

³⁷ Convention internationale sur la protection des droits de tous les travailleurs migrants et des membres de leur famille, art. 25, par. 1 a).

³⁸ Convention relative aux droits des personnes handicapées, art. 27.

³⁹ Pacte international relatif aux droits civils et politiques, art. 2, par. 3 a) ; Comité des droits économiques, sociaux et culturels, observation générale n° 3 (1990) sur la nature des obligations des États parties ; Principes directeurs relatifs aux entreprises et aux droits de l'homme : mise en œuvre du cadre de référence « protéger, respecter et réparer » des Nations Unies.

traduits en justice ⁴⁰. La prévention des expositions futures est commune à de nombreux éléments constitutifs d'un recours utile à cet égard.

37. Afin d'obtenir une réparation appropriée, tout titulaire de droits est habilité à intenter une action devant un tribunal compétent ou un organe d'arbitrage conformément aux règles et procédures prévues par la loi. Les États doivent veiller à ce que les victimes de violations résultant d'une exposition à des produits chimiques dangereux aient accès en temps opportun à des recours utiles (voir E/CN.4/2006/42, par. 45). Dans diverses circonstances, les États ont transféré la charge de la preuve à l'employeur ou à d'autres bénéficiaires de services⁴¹. Dans d'autres cas, les mécanismes judiciaires et non judiciaires ont allégé la charge de la preuve pour les travailleurs afin de faciliter l'accès aux recours⁴².

III. Obstacles à l'exercice des droits des travailleurs victimes d'une exposition à des substances toxiques

A. Normes de protection insuffisantes

38. Souvent, les lois et les politiques en matière de santé au travail ne protègent pas la santé. Ils continuent de permettre d'exposer des travailleurs à des substances toxiques à des niveaux qui sont des centaines, voire des milliers de fois plus élevés que pour les non-travailleurs de la même juridiction⁴³. Les évaluations des risques sont souvent fondées sur des connaissances incomplètes ou de fausses hypothèses, ce qui donne lieu à des assurances trompeuses quant à la sécurité et engendre des effets de grande ampleur sur la santé des travailleurs. Les processus visant à améliorer les normes de protection continuent d'être délibérément retardés depuis des années, voire des décennies, avec pour conséquence un nombre incalculable de décès prématurés.

B. Modestes progrès dans la prévention de l'exposition

39. Le moyen le plus efficace de prévenir l'exposition des travailleurs à des substances toxiques est de les éliminer du lieu de travail. Ceci trouve son expression dans la bonne pratique connue sous le nom de hiérarchie des contrôles des risques, ou de « conception intrinsèquement plus sûre », encouragée par l'Organisation internationale du travail et les organismes nationaux qui s'occupent de la sécurité et de la santé au travail⁴⁴. Par ordre décroissant d'efficacité, l'élimination est suivie d'options d'atténuation des risques telles que le remplacement par des substances et des matières moins dangereuses, les contrôles techniques, les contrôles administratifs et l'utilisation d'équipements de protection individuelle.

40. Bien qu'il en existe des exemples concrets, la pratique susmentionnée reste d'application très restreinte. Exiger l'adoption de la hiérarchie des contrôles en tant que norme internationale permettrait d'uniformiser les règles du jeu par une harmonisation vers le haut. Cependant, les opérateurs économiques continuent d'empêcher les progrès à l'échelle mondiale en arguant qu'appliquer la hiérarchie des contrôles réduirait la compétitivité. Les travailleurs continuent d'être exposés à des substances toxiques,

⁴⁰ Principes fondamentaux et directives concernant le droit à un recours et à réparation des victimes de violations flagrantes du droit international des droits de l'homme et de violations graves du droit international humanitaire, par. 11 et 15 à 23, Comité des droits de l'homme, observation générale n° 31 (2004) sur la nature de l'obligation juridique générale imposée aux États parties au Pacte, par. 16, et Convention relative aux droits de l'enfant, art. 39.

⁴¹ "Presumptive legislation for firefighter cancer", First Responder Center, 2017.

⁴² Junius C. McElveen Jr., "Establishing proof of exposure", Lexology, 2012.

⁴³ Ted Smith et Chad Raphael, "Health and safety policies for electronics workers", dans *The Routledge Companion to Labor and Media*, Richard Maxwell, dir. pub. (Routledge, 2015), p. 78 à 89 (citant Amanda Hawes).

⁴⁴ National Institute for Occupational Safety and Health, "Hierarchy of controls", Centres for Disease Control and Prevention, 11 mai 2018.

y compris à des produits chimiques industriels toxiques et des pesticides très dangereux, alors qu'il existe des solutions de rechange manifestement moins dangereuses. Un exemple flagrant des conséquences de la non-application de la hiérarchie des contrôles est l'externalisation des effets nocifs du démantèlement des navires par l'industrie du transport maritime au détriment des travailleurs et des communautés pauvres dans les pays en développement.

41. Les entreprises peuvent concevoir et adopter des solutions de rechange qui réduisent les méfaits pour la santé humaine et l'impact environnemental de leurs activités et de leurs relations commerciales. Certains l'ont fait. Toutefois, de nombreuses entreprises ont externalisé et/ou enterré le problème de l'exposition aux substances toxiques plus en aval au niveau de leurs chaînes d'approvisionnement mondiales, ce qui leur permet de poursuivre leurs activités comme si de rien n'était, au lieu d'adopter des mesures pour respecter les droits des travailleurs touchés par le travail toxique, alors que l'on attend de plus en plus des entreprises qu'elles empêchent l'exposition des travailleurs à des substances toxiques dans le cadre de l'exercice de la diligence raisonnable en matière de droits de l'homme.

C. Lacunes dans la surveillance et l'application de la loi

42. Pour s'assurer que les entreprises ne ferment pas les yeux sur l'exploitation des travailleurs, les États doivent surveiller les conditions de travail et, notamment, exercer un contrôle de routine de l'exposition à des substances toxiques et appliquer les lois relatives à la protection des droits des travailleurs. Cependant, la grande majorité des États ne s'acquittent pas comme il faut de leurs obligations en matière de surveillance, de contrôle, de protection ou de réparation vis-à-vis des travailleurs relevant de leur juridiction, dont les droits sont violés du fait de leur exposition à des substances toxiques. La baisse systématique du financement des organismes chargés de la surveillance⁴⁵ fait que les États rencontrent des difficultés considérables dans leurs efforts pour surveiller le grand nombre de lieux de travail relevant de leur juridiction et continuent d'avoir du mal à recueillir des informations statistiques, en particulier dans le secteur informel. Dans la plupart des pays, l'enregistrement et la notification des accidents du travail et, en particulier, des maladies professionnelles sont mal faits et ne sont pas harmonisés et les cas sont dans une large mesure sous-déclarés.

D. Exploitation des personnes les plus exposées à un risque

43. Des facteurs multiples tels que le statut social, l'éducation, l'âge, le sexe, le pays d'origine, l'origine ethnique ou le handicap peuvent aggraver les risques d'exposition à des substances toxiques. Pour être efficaces, la prévention et la réponse à l'exposition doivent tenir compte de ces vulnérabilités particulières.

44. Les personnes les plus exposées sont celles qui sont les plus vulnérables à l'exploitation : les pauvres, les enfants et les femmes, les travailleurs migrants, les personnes handicapées et les personnes âgées. Elles sont souvent sujettes à de multiples violations des droits de l'homme et forcées de faire le choix abominable entre leur santé et leur revenu, et la plupart des consommateurs et des décideurs politiques qui ont le pouvoir de rendre possible une juste de transition ignorent tout sur leur sort.

1. Pauvreté

45. La pauvreté est courante parmi la plupart des travailleurs qui sont victimes d'atteintes de leurs droits du fait de leur exposition à des produits chimiques toxiques. Les écarts d'exposition entre les travailleurs à faible revenu et les travailleurs à revenu élevé sont visibles tant à l'intérieur des pays qu'entre eux.

⁴⁵ ILO, *Rapport de la Commission d'experts pour l'application des conventions et recommandations*, Rapport III (partie 1B), contenant l'étude d'ensemble sur certains instruments de sécurité et de santé au travail (Genève, 2017), par. 436.

46. Très souvent, les travailleurs à faible revenu ont un niveau d'instruction plus faible qui les pousse à accepter des emplois qui les exposent à des produits chimiques toxiques, limitent leur accès à l'information et au savoir et ne leur permettent pas de défendre leurs droits. Les effets de l'exposition des travailleurs à faible revenu à des substances toxiques dans le cadre de leur travail sont plus susceptibles d'être imputés à d'autres sources extra-professionnelles d'exposition qui sont plus nombreuses dans les collectivités pauvres comme la contamination de l'air, de l'eau et des aliments, ou à des modes de vie comme les régimes alimentaires malsains et la consommation de tabac et d'autres substances nocives.

47. L'insécurité économique des travailleurs qui sont les plus susceptibles d'être exposés à des substances toxiques est souvent exploitée. La peur de perdre son emploi est souvent utilisée pour dissuader les travailleurs, les organismes de réglementation et les politiciens d'améliorer la protection des travailleurs contre l'exposition à des substances toxiques.

2. Travailleuses

48. Les femmes représentent une proportion importante des travailleurs dans certaines professions et certains secteurs, tels que l'industrie manufacturière et l'agriculture, ainsi que dans les services et le secteur informel où il y a un risque plus élevé d'exposition à des substances toxiques (voir, par exemple, A/HRC/36/41). Des effets sexospécifiques sont signalés. Des indices concordants de plus en plus nombreux montrent qu'il existe un lien entre le cancer du sein et l'exposition professionnelle à divers pesticides, produits chimiques industriels et métaux⁴⁶. Il existe de multiples exemples de risques accrus de fausses couches dans l'industrie des produits électroniques⁴⁷. Des femmes en âge de procréer sont souvent chargées d'utiliser des métaux lourds toxiques comme le mercure dans l'extraction artisanale de l'or, ce qui les expose, elles et leurs futurs enfants, à de graves risques pour leur santé.

3. Travail des enfants

49. Les enfants continuent d'accomplir l'une des pires formes de travail des enfants dans le cadre de laquelle ils utilisent des substances toxiques ou y sont exposés. Pour diverses raisons, ils sont beaucoup plus susceptibles d'être exposés à des substances toxiques et sont plus sensibles à une telle exposition que les adultes, et risquent donc beaucoup plus de souffrir de maladies professionnelles⁴⁸.

50. On estime que 73 millions d'enfants travaillent dans les mines, les champs agricoles et les usines, où la plupart d'entre eux sont susceptibles d'être exposés à diverses substances toxiques⁴⁹. Environ 60 % des enfants travaillent dans l'agriculture, notamment là où des pesticides sont utilisés⁵⁰. On sait aussi que dans moins de 70 pays, des enfants travaillent avec le mercure dans les mines d'or artisanales et à petite échelle, et que certains ont des symptômes qui dénotent un empoisonnement au mercure⁵¹. L'exposition dangereuse des enfants est présente à différents stades du cycle de vie d'un produit de consommation. Dans l'électronique, des dizaines de milliers d'enfants extraient en amont du cycle de vie des produits⁵² un ingrédient toxique des piles (le cobalt) et travaillent aussi, à l'aval, à la récupération des déchets électroniques, stade où ils sont exposés à diverses substances toxiques.

⁴⁶ Concetta Fenga, "Occupational exposure and risk of breast cancer", Biomedical Reports, 21 janvier 2016.

⁴⁷ R.H. Gray and others, *Final Report: The Johns Hopkins University Retrospective and Prospective Studies of Reproductive Health Among IBM Employees in Semiconductor Manufacturing* (Baltimore, Johns Hopkins University, 1993).

⁴⁸ ILO, *Vers l'abolition urgente du travail dangereux des enfants* (Genève, 2018), p. 36.

⁴⁹ Ibid., p. vi.

⁵⁰ ILO, "Hazardous work of children and regulation of hazardous chemicals", 2011.

⁵¹ Human Rights Watch, "Danger, keep out! Children's exposure to toxic substances", 28 avril 2016.

⁵² Amnesty International, « Voilà pourquoi on meurt » : *Les atteintes aux droits humains en République démocratique du Congo alimentent le commerce mondial du cobalt*, 2016.

4. Travailleurs migrants et temporaires

51. Les travailleurs migrants sont exposés à un risque important pour la sécurité et la santé au travail pour plusieurs raisons, notamment le manque de formation, les barrières linguistiques, la discrimination et les restrictions au changement d'employeur⁵³. De nombreux travailleurs migrants ont des emplois insalubres, dangereux et exigeants, ce qui les expose à des risques élevés d'accident du travail et de maladie professionnelle. Les travailleurs migrants en situation irrégulière ou sans papiers courent un risque extrême d'être exploités par des employeurs qui cherchent à se donner de façon déloyale un avantage par rapport à leurs concurrents. Les migrations clandestines, la traite des personnes et l'esclavage moderne peuvent faire que des travailleurs migrants sont exposés à des substances toxiques.

52. Les travailleurs temporaires, y compris les saisonniers, ne bénéficient souvent pas de la même protection en matière de sécurité et de santé que celle accordée aux travailleurs permanents ou résidents. Ils sont beaucoup plus exposés à des risques d'accident du travail et de maladie professionnelle. Ils peuvent changer de lieu de travail plusieurs fois par an et, en tant que nouveaux travailleurs, ils ont généralement moins d'informations sur les dangers auxquels ils sont confrontés. Les employeurs sont souvent moins enclins à former les travailleurs temporaires ou à faire des investissements pour les protéger⁵⁴. Les directives et les activités d'inspection des pouvoirs publics en matière de sécurité et de santé peuvent être limitées.

5. Travailleurs handicapés

53. Un travailleur handicapé peut être exposé à des risques supplémentaires ou être plus vulnérable aux conséquences de l'exposition à des substances toxiques. Les travailleurs handicapés ont tendance à occuper des emplois peu qualifiés, dans le cadre de contrats atypiques, tels que les contrats de travail à temps partiel ou de travail temporaire.

6. Travailleurs âgés

54. Les personnes âgées sont également exposées à des substances toxiques au travail. En général, le vieillissement est associé à un déclin des fonctions cognitives, de la santé et de la capacité de récupération, y compris une diminution de la capacité aérobie, une baisse de la tolérance à la chaleur, une perte de force musculaire et une diminution de l'acuité visuelle et auditive. Tout risque auquel les travailleurs vieillissants sont exposés en raison de leur activité professionnelle se superposera à leurs problèmes de santé existants ou amplifiera la détérioration naturelle de leurs capacités sensorielles et physiques. Malheureusement, les effets de l'exposition à des substances nocives au travail sur la santé des travailleurs âgés sont souvent attribués entièrement au vieillissement et non à l'exposition elle-même.

E. Économie informelle

55. Les politiques et programmes nationaux destinés à promouvoir des conditions de travail sûres et salubres devraient viser non seulement l'économie formelle mais aussi l'économie informelle. Dans de nombreux pays en développement, le nombre des travailleurs du secteur structuré est faible par rapport à celui des travailleurs du secteur informel. Ceux qui travaillent dans le secteur informel ne sont généralement pas pris en compte dans les statistiques relatives aux effets des substances dangereuses sur les travailleurs⁵⁵.

⁵³ Kawon Lee, Connor McGuinness et Tsuyoshi Karaskami, *Research on Occupational Safety and Health for Migrant Workers in Five Asia and the Pacific Countries: Australia, Republic of Korea, Malaysia, Singapore and Thailand* (Bangkok, OIT, 2011), p. 20.

⁵⁴ Ministère du travail des États-Unis, *Adding Inequality to Injury: The Costs of Failing to Protect Workers on the Job* (2015).

⁵⁵ Hämäläinen, p. 7.

F. Efforts délibérés pour retarder ou entraver la protection contre l'exposition à des substances toxiques

56. Pour réaliser des gains économiques, les entreprises ont cherché à retarder l'adoption de lois et de règlements de protection par des campagnes ciblées visant à fausser les faits scientifiques⁵⁶ et à exploiter l'insécurité financière des travailleurs par la menace de la perte d'emplois. Ces campagnes ont essentiellement visé à saper les droits des travailleurs en brandissant la menace de pertes d'emploi et de compétitivité, capitalisant ainsi sur les craintes économiques des travailleurs. Les travailleurs continuent de redouter des réductions de salaire ou un licenciement s'ils refusent ou cessent d'accomplir un travail qui les expose à des substances toxiques.

57. En outre, les entreprises continuent de déformer les preuves de dangers intrinsèques, d'exposition nocive et d'autres facteurs de risque pour divers types de produits chimiques toxiques (comme par exemple les cancérigènes). Les entreprises et leurs agents se sont engagés dans des campagnes ciblées pour susciter des doutes et des incertitudes autour des résultats d'études scientifiques qui mettent en lumière les risques et les effets sur la santé des travailleurs.

58. Les efforts déployés par les entreprises pour entraver l'adoption de lois de protection de la santé, de normes d'exposition et de meilleures pratiques illustrent le mépris avec lequel certaines entreprises appréhendent leur responsabilité pour ce qui est de prévenir l'exposition des travailleurs à des substances toxiques. Cela va au-delà du simple manque de respect, le but étant de perpétuer l'exploitation des inégalités au sein des sociétés et entre elles.

G. Chaînes d'approvisionnement opaques et transfert de travail dangereux

59. Par-delà les avantages dont peut s'accompagner le transfert international de technologies bénéfiques, la délocalisation de tâches toxiques de pays dotés de systèmes plus avancés vers des pays où les normes de protection des travailleurs sont moins strictes demeure un problème majeur. Par exemple, les activités de fabrication et de transformation grandes consommatrices de produits chimiques, autrefois situées en grande partie dans les pays hautement industrialisés, sont maintenant en expansion constante dans les pays en développement et les pays à économie en transition suite à la mondialisation des chaînes d'approvisionnement⁵⁷.

60. Le transfert international d'activités dangereuses et insalubres, qu'il s'agisse de l'extraction de ressources naturelles, de l'utilisation de produits chimiques et de pesticides toxiques ou de l'élimination de déchets dangereux, sans que soient prises les mesures requises pour protéger les travailleurs contre l'exposition à des substances toxiques, fait courir aux travailleurs et à leurs communautés un risque considérable d'atteinte grave à leurs droits humains⁵⁸. Le manque de transparence tout au long des chaînes d'approvisionnement exacerbe le problème et entrave les efforts de diverses parties prenantes pour améliorer la santé au travail.

H. Efforts disparates en matière de santé au travail et d'hygiène du milieu

61. Un lieu de travail toxique engendre généralement un environnement toxique. Par exemple, les polluants atmosphériques nuisent à la santé des travailleurs directement exposés, mais aussi à celle de leurs enfants et du reste de la communauté. Les travailleurs

⁵⁶ David Michaels, dir.pub., *Doubt Is Their Product: How Industry's Assault on Science Threatens Your Health* (Oxford, Oxford University Press, 2008).

⁵⁷ Programme des Nations Unies pour l'environnement, *Global Chemicals Outlook: Towards Sound Management of Chemicals* (2013).

⁵⁸ Ibid.

qui exercent une activité dans l'exploitation minière artisanale, l'élimination des déchets, diverses industries manufacturières (comme le textile) et l'agriculture, où ils sont fortement exposés à des produits toxiques, travaillent souvent très près de leur domicile et de leur communauté et sont parfois accompagnés ou aidés par leurs enfants. Toutefois, les synergies qui pourraient résulter de liens plus étroits entre le travail et l'hygiène du milieu ne sont souvent pas réalisées.

I. Non-réalisation du droit à l'information

62. Les lacunes dans le domaine de l'information constituent un obstacle fondamental au respect, à la protection et à la réalisation de plusieurs droits de l'homme qui sont sujets à des atteintes ou des violations du fait de l'exposition des travailleurs à des produits chimiques toxiques (voir A/HRC/30/40, par. 22 et 24 à 25)⁵⁹.

63. Au niveau le plus fondamental, il n'y a toujours pas d'informations complètes sur les risques intrinsèques pour la santé de la grande majorité des produits chimiques industriels, y compris sur leur capacité de provoquer le cancer, d'être mutagènes ou d'être préjudiciables à la santé génésique (A/HRC/30/40). En outre, la forme et le contenu des informations communiquées aux travailleurs concernant les risques pour la santé demeurent très problématiques. L'absence d'informations ou une communication de celles-ci laissant à désirer équivaut à une tromperie et le fait de tromper des travailleurs est une forme d'exploitation, assimilable à un travail forcé ou obligatoire⁶⁰.

64. Bien que les évaluations des risques aient aidé à identifier et à restreindre l'utilisation de substances dangereuses pour les travailleurs, il existe des limites, notamment la difficulté de prévoir les niveaux d'exposition des travailleurs, le fait que les dangers pour la santé ne soient connus que pour une minorité de substances et le manque d'information sur les dangers inhérents à des dizaines de milliers de substances et le fait que l'on sait peu de choses au sujet des effets d'une exposition conjuguée à différentes substances dangereuses, des substances intermédiaires dans les processus de production et des produits de la décomposition des substances au fil du temps dans différentes conditions.

65. Les demandes de confidentialité ou de secret constituent un obstacle persistant à la réalisation du droit à l'information sur les produits chimiques toxiques. Les demandes illégitimes visant à préserver la confidentialité d'informations commerciales ou de secrets commerciaux concernant des substances toxiques et d'éventuelles expositions peuvent priver les travailleurs de leurs droits en tant qu'êtres humains, y compris du droit à des conditions de travail sûres et salubres et du droit d'accès à des recours. Les demandes illégitimes de maintien de la confidentialité et du secret au sujet des informations sur la santé et la sécurité peuvent masquer les problèmes et étouffer ainsi la recherche innovante sur les produits et les processus pour améliorer la santé au travail, tout en favorisant un sentiment d'impunité qui peut devenir contagieux parmi les entreprises qui continuent à exploiter des travailleurs et à violer leurs droits en les exposant à des substances toxiques ; elles peuvent aussi cautionner le fait d'en tirer profit.

66. Il est très important que les renseignements sur la santé soient recueillis, traités et utilisés dans un système bien contrôlé qui protège la vie privée des travailleurs et empêche que la surveillance de la santé ne soit pas utilisée à des fins discriminatoires ou à toute autre fin préjudiciable à leurs intérêts⁶¹. Mais il est tout aussi important que les travailleurs aient accès à leur propre dossier médical.

⁵⁹ Voir également l'observation générale n° 34 (2011) du Comité des droits de l'homme sur la liberté d'opinion et la liberté d'expression, par. 18.

⁶⁰ Voir, par exemple, la loi de 2015 sur l'esclavage moderne du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord.

⁶¹ OIT, *Principes techniques et éthiques de la surveillance de la santé des travailleurs : Principes directeurs*, Série Sécurité et santé au travail n° 72 (Genève, 1998).

J. Application limitée des instruments de l'Organisation internationale du Travail

67. D'aucuns craignent que les normes de l'OIT pour la protection des droits de l'homme des travailleurs ne soient pas dûment appliquées et que d'autres soient dépassées. Une étude indépendante commandée par l'OIT aux fins d'analyser ses propres problèmes d'organisation a attribué cette situation, entre autres, à la collaboration restreinte ou inexistante entre ses organes et aux ressources financières limitées consacrées aux activités relatives à la sécurité et à la santé au travail⁶².

68. Le faible taux de ratification des instruments de l'OIT sur la sécurité et la santé au travail, qui peuvent pourtant constituer dans certains cas des modèles utiles pour des normes nationales, est peut-être un autre facteur à l'origine de cette situation. Un autre encore serait l'exclusion regrettable du droit à un travail sûr et salubre de la liste des droits fondamentaux du travail par le Conseil d'administration de l'OIT.

K. Restrictions à la liberté d'association

69. Des difficultés persistent dans la réalisation de ce que l'OIT considère comme un des droits fondamentaux sur le lieu de travail, à savoir le droit à la liberté d'association, le droit de s'organiser et le droit à la négociation collective. Certaines catégories de travailleurs se voient refuser le droit d'association dans certains pays⁶³. De manière illégale, des organisations de travailleurs et d'employeurs sont suspendues ou victimes d'ingérences et, dans certains cas extrêmes, des syndicalistes sont arrêtés ou tués (A/71/385)⁶⁴. L'incapacité d'exercer ces droits, ainsi que les restrictions à la liberté d'expression, entravent l'aptitude des travailleurs à défendre individuellement et collectivement leurs droits contre les abus inhérents à l'exposition à des produits toxiques.

L. Recours inaccessibles, justice et obligation de rendre des comptes

70. Des études suggèrent que seule une infime fraction de travailleurs victimes d'une exposition à des substances dangereuses a accès à des recours⁶⁵. Les principaux obstacles au respect de l'obligation de rendre des comptes sont la charge de la preuve déraisonnablement lourde ; les longues périodes de latence avant que les effets d'une exposition n'apparaissent dans certains cas et la difficulté d'établir le lien de causalité ; les lacunes importantes dans les informations concernant l'identification des dangers, la mesure de l'exposition et la détermination de l'impact épidémiologique ; l'exposition possible à une multitude de substances différentes dans divers lieux de travail et au cours d'une vie active ; et les dispositions contractuelles des relations entre les fournisseurs et les acheteurs qui peuvent déplacer la responsabilité vers le haut ou le bas d'une chaîne d'approvisionnement.

71. Les types d'information requis et la responsabilité pour ce qui est d'apporter la preuve de la cause des préjudices subis sont souvent des dénominateurs communs dans les cas où les travailleurs ont du mal à accéder à des recours utiles. Ces derniers n'ont souvent pas les connaissances et les ressources nécessaires pour établir les éléments requis pour pouvoir accéder aux recours. Premièrement, il n'est pas rare qu'ils ne sachent pas à quelles substances ils ont été exposés. Deuxièmement, les substances auxquelles ils ont été exposés n'ont peut-être pas été étudiées sous l'angle de leur capacité de causer des maladies ou des handicaps chez les humains ; il n'y a pas suffisamment d'informations adéquates, ni même un minimum de données sur la santé et la sécurité, pour des dizaines de milliers de produits chimiques industriels potentiellement dangereux. Troisièmement, lorsque des allégations

⁶² ILO, *Independent Evaluation of the ILO's Strategy on Occupational Safety and Health Conditions at Work* (2013), p. 46 et 47.

⁶³ Voir OIT, normes internationales du travail sur la liberté d'association.

⁶⁴ Ibid.

⁶⁵ Andrew Watterson et Rory O'Neill, "Double trouble on relative risk for occupational diseases", *Hazards Magazine*, mars 2015.

d'exposition à des substances dangereuses sont formulées, « des preuves objectives de l'étendue ou même de l'existence de l'exposition ne sont presque jamais disponibles »⁶⁶, bien qu'il devrait incomber à l'employeur de rechercher et de tenir à jour ces données, et le manquement en la matière sert à justifier le déni inacceptable de l'accès des travailleurs malades et handicapés à des recours. Enfin, les travailleurs changent souvent d'employeurs et de branche d'activité, ce qui fait qu'ils peuvent être exposés à diverses substances dangereuses. Le comportement personnel des travailleurs, comme la consommation de tabac ou d'alcool, peut être invoqué pour rendre encore plus complexe l'établissement du lien de causalité.

IV. Conclusions et recommandations

72. L'exposition des travailleurs à des substances toxiques peut et doit être considérée comme une forme d'exploitation et constitue un problème mondial qui touche tous les pays, quel que soit leur niveau de développement. Les États, les entreprises et les organisations internationales peuvent mettre fin à l'exposition des travailleurs à des substances toxiques ou la réduire au minimum et doivent le faire d'urgence.

73. Le Rapporteur spécial propose 15 principes pour aider les États, les entreprises et d'autres parties prenantes à protéger, respecter et réaliser les droits de l'homme des travailleurs qui sont violés du fait de leur exposition à des substances toxiques ou dangereuses au travail. Ces principes sont fondés sur le droit international des droits de l'homme et s'appuient, entre autres, sur les Principes directeurs relatifs aux entreprises et aux droits de l'homme, les instruments de l'OIT et les accords internationaux sur les produits chimiques et les déchets toxiques⁶⁷. Ces principes procèdent des cas portés à l'attention des rapporteurs spéciaux depuis l'établissement du mandat en 1995.

74. Le Rapporteur spécial pense que si ces principes sont mis en œuvre, ils contribueront à renforcer la cohérence entre les droits de l'homme et les normes relatives à santé et la sécurité au travail en ce qui concerne l'exposition des travailleurs à des substances toxiques. Ces principes ne se veulent pas définitifs, mais marquent le début d'un processus visant à clarifier les devoirs et les responsabilités de toutes les parties.

75. Au cours des prochains mois, le Rapporteur spécial recueillera des informations auprès des États et d'autres parties prenantes sur la manière dont ces principes sont, le cas échéant, incorporés dans leurs lois, politiques et procédures relatives à l'exposition à des substances toxiques au travail. Il a l'intention de présenter au Conseil des droits de l'homme lors d'une prochaine session un ensemble de principes plus élaborés qui dotera les États, les entreprises et d'autres acteurs d'un cadre d'application. Le Rapporteur spécial encourage l'OIT et l'OMS à poursuivre leurs efforts dans ce domaine, et l'OIT, en particulier, à faire en sorte que ces principes soient pris en compte dans ses efforts pour examiner et réviser ses conventions et normes relatives à la sécurité et à la santé du travail.

A. Principes relatifs aux devoirs et responsabilités en matière de prévention de l'exposition à des substances toxiques

76. Les États ont le devoir et les entreprises la responsabilité de respecter, de protéger et de réaliser les droits des travailleurs ; les consommateurs, les militaires,

⁶⁶ McElveen, "Establishing proof of exposure".

⁶⁷ Voir par exemple les recommandations adoptées par la Conférence internationale sur la gestion des produits chimiques (SAIGM/ICCM.3/15) et les recommandations d'un atelier international sur les substances dangereuses dans le cycle de vie des produits des industries électrique et électronique, tenu à Vienne en 2011 (SAIGM/OEWG.1/11).

les investisseurs et d'autres parties ont aussi des responsabilités qui doivent être prises en considération.

Principe 1 – Les États ont le devoir de protéger les droits humains de tous les travailleurs en empêchant leur exposition à des substances toxiques.

77. Les États doivent faire tout ce qui est en leur pouvoir pour protéger tous les travailleurs contre l'exposition à des substances toxiques au travail sur leur territoire et/ou dans leur juridiction. Cette obligation existe indépendamment du fait que l'employeur soit une entreprise ou un État. Pour s'en acquitter, il est nécessaire de prendre les mesures requises pour prévenir les cas d'exposition à des substances toxiques et dangereuses au travail, d'enquêter sur ces cas, de punir les responsables et d'accorder une réparation aux victimes au moyen de politiques, de lois, de règlements et de mesures d'application efficaces, ainsi que par le biais de l'arbitrage⁶⁸.

78. Les droits de l'homme sont universels. Toutes les personnes ont un droit égal à des conditions de travail sûres et salubres, sans distinction aucune fondée sur le revenu, l'âge, le sexe, l'origine ethnique, la race, la religion ou toute autre classification ou situation. Les États ont renforcé leurs obligations en ce qui concerne la protection des travailleurs exposés à des risques sociaux ou physiologiques élevés, y compris les travailleurs du secteur informel des chaînes d'approvisionnement mondiales. Les migrants, les minorités et les personnes handicapées ont droit aux mêmes normes de protection. Les enfants et les femmes enceintes ne devraient jamais utiliser des substances toxiques ou y être exposés au travail. Des mesures spéciales doivent être prises pour protéger les travailleurs des secteurs à haut risque tels que l'exploitation minière, l'agriculture, le bâtiment, l'énergie, la défense, l'industrie manufacturière et l'élimination des déchets, entre autres, contre l'exposition à des substances toxiques.

Principe 2 – Les entreprises ont la responsabilité d'empêcher l'exposition à des substances toxiques.

79. Les entreprises ont la responsabilité, dans le cadre de l'exercice de la diligence raisonnable dont elles sont censées faire preuve, « de prévenir [et] d'atténuer » les effets de l'exposition à des substances toxiques sur les droits de l'homme, y compris les droits des travailleurs⁶⁹. Ces entreprises comprennent, entre autres, les employeurs, les acheteurs de produits et les fournisseurs de substances toxiques. Les « effets » dont les entreprises sont responsables sont l'exposition à des substances toxiques et les incidences néfastes de cette exposition sur la santé. Cette responsabilité implique l'amélioration continue des conditions de travail et s'étend aux effets sur les droits de l'homme qui résultent de leurs relations commerciales et des opérations de leurs chaînes d'approvisionnement, tant au pays qu'à l'étranger, tout au long du cycle de vie de leurs produits⁷⁰.

80. Dans les procédures de diligence raisonnable, la prévention des violations des droits de l'homme est un principe et un prélude à l'atténuation⁷¹. Pour prévenir les effets sur les droits des travailleurs, les entreprises ont la responsabilité, d'abord et avant tout, d'empêcher l'exposition en éliminant dans toute la mesure possible les substances toxiques de leurs produits et procédés de production. Si des risques ne peuvent être éliminés, les entreprises devraient appliquer rigoureusement et systématiquement la hiérarchie des mesures de contrôle pour empêcher l'exposition, l'équipement de protection individuelle constituant alors le dernier recours. Lorsque l'exposition ne peut être évitée par l'application de la hiérarchie des mesures de contrôle, les entreprises doivent en atténuer les effets sur la santé.

⁶⁸ Principes directeurs relatifs aux entreprises et aux droits de l'homme, principes 1, 4 et 15.

⁶⁹ Ibid., principe 15.

⁷⁰ Voir, par exemple, Global Sustainability Standards Board, Global Reporting Initiative, *GRI 403: Occupational Health and Safety 2018*.

⁷¹ Principes directeurs relatifs aux entreprises et aux droits de l'homme.

Principe 3 – L'élimination des risques est primordiale pour empêcher l'exposition à des substances toxiques au travail.

81. Les États devraient incorporer la hiérarchie des mesures de contrôle des risques dans leur législation afin empêcher, dans la mesure du possible, l'exposition des travailleurs à des substances toxiques. Vu le niveau élevé d'incertitude scientifique qui règne souvent, ils devraient veiller à ce que leurs lois et politiques intègrent de manière effective le principe de précaution. Dans le cadre de leur législation sur la sécurité et la santé du travail, les États devraient obliger les entreprises à éliminer les risques chaque fois que cela est possible et à appliquer la hiérarchie des mesures de contrôle lorsqu'un risque ne peut être éliminé.

Principe 4 – Les travailleurs ont le droit de ne pas être exposés à des substances toxiques sans leur consentement préalable en connaissance de cause.

82. Le droit des travailleurs à des conditions de travail sûres et salubres englobe leur droit de ne pas être exposés à des substances toxiques sans leur consentement préalable en connaissance de cause. Les travailleurs ont le droit de refuser d'être placés dans des situations où ils sont exposés à des produits chimiques toxiques et à d'autres substances dangereuses lorsqu'ils ont un motif raisonnable de croire qu'ils présentent un danger pour eux.

83. Les États devraient respecter, protéger et réaliser le droit des travailleurs de ne pas être exposés à des substances toxiques sans leur consentement préalable en connaissance de cause. Ils devraient prévoir explicitement ce droit dans leurs lois, enquêter sur toute violation présumée et sanctionner les auteurs si la situation le justifie, et ratifier les conventions de l'OIT. Les États devraient inclure le non-respect par les entreprises du principe ci-dessus dans leurs définitions du travail forcé, de l'esclavage moderne et/ou de l'exploitation.

84. Les employeurs ont la responsabilité d'informer pleinement les travailleurs et d'obtenir leur consentement avant de les exposer à des substances toxiques. Ils devraient respecter ce principe et ce droit indépendamment de la volonté de l'État d'adopter les lois nécessaires. Les employeurs devraient être en mesure d'apporter la preuve qu'ils ont informé tous leurs employés, sous-traitants et fournisseurs de ce droit et que des mécanismes ou des procédures pour leur permettre d'éviter de travailler dans des conditions dangereuses ou insalubres. L'absence de tels mécanismes ou procédures ne devrait pas être un obstacle à l'exercice de ce droit.

Principe 5 – Les devoirs et responsabilités en matière de prévention de l'exposition des travailleurs à des substances toxiques s'étendent au-delà des frontières.

85. La délocalisation de travaux dangereux vers des pays dont le niveau de protection est plus faible devrait être considéré comme une forme d'exploitation si des mesures raisonnables ne sont pas prises pour protéger les travailleurs.

86. Les États sont tenus de prendre des mesures raisonnables pour empêcher l'exposition des travailleurs à des substances toxiques qui se produit en dehors de leur territoire et qui donne lieu à des violations des droits applicables en la matière du fait d'activités d'entreprises sur lesquelles ils peuvent exercer un contrôle et qui sont raisonnablement prévisibles⁷². Les États devraient exiger de telles entreprises qu'elles agissent avec la diligence voulue pour repérer et prévenir les abus commis par des filiales, des fournisseurs et d'autres partenaires commerciaux opérant à l'étranger.

87. Les entreprises sont responsables des conséquences de l'exposition des travailleurs à des substances dangereuses dont elles sont la cause ou à laquelle elles contribuent ou sont liées⁷³. Les entreprises ont des responsabilités tout au long du

⁷² Comité des droits économiques, sociaux et culturels, observation générale n° 24 (2017) sur les obligations des États en vertu du Pacte international relatif aux droits économiques, sociaux et culturels dans le contexte des activités des entreprises, par. 30 à 32.

⁷³ Principes directeurs relatifs aux entreprises et aux droits de l'homme, principe 13.

cycle de vie de leurs produits, depuis l'extraction jusqu'à l'élimination finale, en amont et en aval de leurs chaînes d'approvisionnement. Ils ont la responsabilité de veiller à ce que elles-mêmes et leurs fournisseurs, tant au pays qu'à l'étranger, adoptent de bonnes pratiques telles que la hiérarchie des mesures de contrôle des risques, afin de prévenir l'exposition à des substances toxiques dues à leurs produits tout au long de leur cycle de vie, à leurs opérations et à leurs services.

Principe 6 – Les États doivent empêcher les tiers de déformer les preuves scientifiques ou de manipuler les processus pour perpétuer l'exposition à des substances toxiques.

88. Les États doivent empêcher, par la législation ou d'autres mesures, la déformation délibérée de preuves scientifiques ou la manipulation de processus par des entreprises et d'autres parties au détriment de la santé et de la sécurité des travailleurs. La protection de la santé publique est une dérogation légitime au droit à la liberté d'expression. Des sanctions pénales devraient être prévues en cas d'abus de ce type de la part d'entreprises et d'autres parties.

Principe 7 – La protection des travailleurs contre l'exposition à des substances toxiques protège leur famille, leur communauté et l'environnement.

89. La protection des travailleurs contre l'exposition à des substances toxiques a des retombées bénéfiques sur l'ensemble de la société. Les États devraient reconnaître la complémentarité entre la protection des travailleurs contre l'exposition à des substances toxiques au travail et la protection de l'environnement. Les lois et les politiques visant à protéger la santé humaine contre les substances dangereuses devraient tenir compte, entre autres facteurs, à la fois de l'exposition à des substances toxiques au travail et de l'exposition à des polluants dans l'environnement. Les États devraient assurer une coopération efficace entre les autorités responsables du travail, de la santé publique et de l'environnement.

B. Principes relatifs à l'information, à la participation et à l'action collective

90. L'exercice des droits à l'information, à la participation et à la liberté d'expression et d'association, ainsi que du droit de se syndiquer et de négocier collectivement permet de prévenir les violations des droits de l'homme résultant de l'exposition des travailleurs à des substances toxiques. En outre, il est nécessaire de donner pleinement effet au droit à l'information pour que les travailleurs puissent exercer leur droit à un recours utile contre les effets néfastes de cette exposition.

Principe 8 – Chaque travailleur a le droit de savoir, y compris le droit de connaître ses droits.

91. Chaque travailleur a le droit d'accéder à l'information actuelle sur son exposition réelle et potentielle à des substances toxiques ou dangereuses. L'information sur la santé et la sécurité au travail doit être disponible et accessible aux travailleurs sous une forme qui réponde de manière effective à leurs besoins, en fonction de leurs compétences et de leur situation, et communiquée par la formation et par d'autres moyens (A/HRC/30/40). Les États, les employeurs et les entreprises doivent communiquer efficacement aux travailleurs, aux syndicats et aux autres représentants des travailleurs les informations relatives à la santé et à la sécurité, y compris les résultats des examens médicaux.

92. Les États ont le devoir de produire, collecter, évaluer et mettre à jour les informations sur les dangers et les risques encourus par les travailleurs, ainsi que les preuves épidémiologiques des maladies et des handicaps professionnels (ibid.).

93. Les entreprises sont tenues de déterminer et d'évaluer l'exposition réelle et potentielle des travailleurs à des substances dangereuses dans leurs chaînes d'approvisionnements et dans le cadre de leurs propres activités (ibid.). Ceci englobe l'information sur les différents types de substances dangereuses dans les lieux de

travail, les dangers inhérents à ces substances et les données relatives à l'exposition. Les fournisseurs de produits chimiques ont des responsabilités plus grandes pour ce qui est de rechercher et d'évaluer les informations pour la protection des travailleurs et de communiquer ces informations aux travailleurs eux-mêmes, aux employeurs, à d'autres entreprises et aux États⁷⁴.

94. Outre le droit à l'information sur les risques professionnels, les travailleurs ont le droit d'être informés de tous leurs droits et des devoirs et responsabilités des États et des entreprises à leur égard, ainsi que de la manière dont ils peuvent exercer et défendre leurs droits lorsqu'ils sont victimes d'abus ou de violations de leurs droits.

Principe 9 – L'information sur la santé et la sécurité concernant les substances toxiques ne doit jamais être confidentielle.

95. Les États ont le devoir de vérifier la légitimité des allégations selon lesquelles certaines informations sur des substances toxiques constituent des renseignements commerciaux confidentiels ou des secrets commerciaux (ibid.). Bien que la confidentialité des antécédents médicaux personnels doive être assurée, ceux-ci ne doivent pas être utilisés pour masquer des problèmes de santé survenant sur le lieu de travail. Les États devraient veiller à ce que des sanctions pénales soient applicables aux entreprises et aux autres parties qui refusent de divulguer des informations relatives à la santé et à la sécurité. Les employeurs et les fournisseurs de substances chimiques devraient clairement proclamer qu'ils ne garderont pas de telles informations secrètes.

Principe 10 – Le droit à des conditions de travail sûres et salubres est indissociable de la liberté d'association, du droit d'organisation et du droit à la négociation collective.

96. La liberté d'association et la reconnaissance effective du droit à la négociation collective sont des droits fondamentaux du travail qui s'appliquent à tous les individus dans tous les États, quel que soit le niveau de développement économique⁷⁵. Sans la liberté d'association, y compris le droit de former des syndicats, et sans le droit à la négociation collective, les travailleurs ont peu de chances de pouvoir défendre leur droit à des conditions de travail sûres et salubres et d'autres droits de l'homme. Pour que les obligations en matière de droits de l'homme soient respectées et que l'objectif d'un développement durable soit atteint, les détenteurs de droits doivent être associés au processus, et la participation des travailleurs dans l'ensemble du système devrait être assurée⁷⁶.

97. Les États sont tenus de protéger, promouvoir, respecter et réaliser les droits à la liberté d'association, d'organisation et de négociation collective au moyen d'une législation, d'une réglementation et de politiques efficaces. Ils doivent veiller à ce que chacun puisse exercer son droit à la liberté d'association sur le lieu de travail sans aucune discrimination⁷⁷.

98. Les entreprises devraient s'acquitter de leur obligation de respecter les droits des travailleurs à la liberté d'association, d'organisation et de négociation collective. Les États devraient jouer leur rôle dans la prévention ou l'élimination des violations de ces droits par les entreprises et d'autres parties.

Principe 11 – Les travailleurs, leurs représentants, les lanceurs d'alerte et les défenseurs des droits doivent tous être protégés contre les représailles et la menace de représailles.

99. Le fait donner aux titulaires de droits, en particulier à ceux qui sont les plus exposés à des risques, des moyens pour défendre leurs droits aide les États à

⁷⁴ Convention de l'OIT sur les produits chimiques.

⁷⁵ Déclaration de l'OIT relative aux principes et droits fondamentaux au travail (1998).

⁷⁶ Convention de l'OIT sur la sécurité et la santé.

⁷⁷ Fondée par exemple sur le type de travail ou d'emploi, la nature du lieu de travail, de l'entreprise ou du secteur ou le statut d'émigré ou autre.

s'acquitter des obligations qui leur incombent en vertu du droit relatif aux droits de l'homme et permet de faire respecter le principe de la responsabilité et les droits à l'information et à un recours utile, entre autres.

100. Pour que les travailleurs puissent jouir de leur droit à des conditions de travail sûres et salubres, eux ou leurs représentants doivent pouvoir faire part de leurs préoccupations à leur employeur, à leurs collègues et aux organismes publics sans crainte de représailles. Les travailleurs, les lanceurs d'alerte et les défenseurs des droits de l'homme doivent être à l'abri de l'intimidation, des menaces et autres mesures de représailles dont ils peuvent être victimes pour avoir exercé leurs droits et défendu les droits de ceux qui sont ou peuvent être victimes d'une exposition à des substances toxiques ou dangereuses au travail.

101. La menace de perte d'emploi ou de revenu ne devrait jamais être utilisée pour obtenir un avantage lorsqu'on tente de parvenir à un accord sur la protection des droits des travailleurs à des conditions de travail sûres et salubres. Ceci englobe la menace de délocaliser des emplois.

102. Les États devraient mettre en place des programmes nationaux de protection des défenseurs des droits des travailleurs et engager les procédures disciplinaires, civiles et pénales requises contre les auteurs de représailles, d'actes d'intimidation ou de menaces de représailles à leur encontre. Ils devraient commander des examens périodiques indépendants des programmes nationaux de protection afin de renforcer l'efficacité de la protection des défenseurs des droits des travailleurs, en consultation avec les travailleurs, les lanceurs d'alerte et les défenseurs eux-mêmes, ainsi qu'avec les syndicats et les organisations de la société civile qui les représentent.

C. Principes relatifs aux recours utiles

103. Garantir l'accès à la justice et à des recours utiles peut motiver les entreprises à concevoir et à adopter des pratiques plus sûres qui engagent leur responsabilité, allant du choix d'options moins dangereuses à l'adoption de mesures de contrôle technique pour réduire l'exposition aux substances toxiques. D'autre part, l'impunité de certaines entreprises et d'autres bénéficiaires dont les actes ou omissions ont pour effet d'exposer des travailleurs à des substances toxiques est un obstacle à l'amélioration de la situation d'innombrables travailleurs à travers le monde. L'inaccessibilité généralisée des recours utiles aux travailleurs exposés à des substances toxiques constitue un obstacle à la transition vers l'instauration de conditions de travail plus sûres et plus salubres pour des millions de travailleurs dans le monde.

Principe 12 – Les États devraient ériger en infraction pénale le fait de permettre que des travailleurs soient exposés à des substances dont on sait ou devrait savoir qu'elles sont dangereuses.

104. Des sanctions pénales devraient être prévues pour aider à faire respecter les obligations en matière de droits de l'homme et lutter contre l'impunité.

105. Les États devraient veiller à ce qu'en vertu de leur législation, la responsabilité pénale des employeurs et d'autres personnes et entités soient engagées en cas d'exposition de travailleurs à des substances qui sont ou devraient être connues pour être dangereuses. Les États devraient dans ces cas enquêter et engager des poursuites, en veillant à ce que les chefs d'entreprise assument leurs responsabilités aux côtés d'autres parties impliquées sciemment ou par négligence.

Principe 13 – Les travailleurs, leur famille et leur communauté doivent avoir un accès immédiat à un recours approprié et utile, qui devrait être disponible dès l'exposition à des substances toxiques.

106. Ce n'est pas seulement lorsqu'une maladie ou un handicap survient chez un travailleur ou l'enfant d'un travailleur que les travailleurs exposés à des substances

toxiques sont lésés et victimes d'abus ou de violations de leurs droits. La période de latence des maladies et des incapacités après l'exposition qui peut durer des années voire des décennies après l'exposition peut rendre l'accès à un recours utile impossible pour de nombreux travailleurs et leurs familles.

107. Un recours approprié et utile englobe une réparation rapide du préjudice subi, des soins de santé, une indemnisation, des garanties de non-répétition, ainsi qu'une formation adéquate pour la réadaptation, la réinsertion et des aménagements raisonnables⁷⁸. Un recours utile implique également des poursuites à l'encontre des responsables de l'exposition des travailleurs à des substances toxiques.

108. C'est aux États qu'il incombe au premier chef de garantir l'exercice par le travailleur de son droit à un recours approprié et utile, y compris en vertu de leurs lois. Les États ont l'obligation d'enquêter automatiquement sur l'existence éventuelle de violations généralisées après qu'un seuil minimum a été atteint et de s'engager dans une coopération internationale à cette fin. Une telle enquête est sans préjudice de toute investigation ou action entreprise par la victime pour obtenir un recours utile. Les États devraient veiller à ce qu'il soit mis fin aux conditions qui font que des travailleurs sont exposés à des substances toxiques, notamment en modifiant les lois et pratiques en vigueur, en interdisant la production et l'utilisation de certaines catégories de substances et en diffusant des informations pour éviter toute répétition (voir A/HRC/33/41, par. 40). Les sanctions imposées devraient être suffisamment lourdes pour inciter et motiver les entreprises et d'autres parties à prendre des mesures de précaution afin de prévenir l'exposition de travailleurs à des substances toxiques et constituer des mesures dissuasives pour garantir la non-répétition.

109. Les entreprises qui sont à l'origine de l'exposition à des substances toxiques au travail, y contribuent ou y sont associées ont la responsabilité d'établir de solides procédures pour permettre aux travailleurs d'avoir accès en temps voulu à un recours approprié et utile.

Principe 14 – Les travailleurs ou leurs familles ne devraient pas avoir à prouver la cause de leur maladie ou de leur handicap avant d'avoir accès à un recours utile.

110. Faire supporter la charge de la preuve à ceux qui sont lésés par une exposition à des substances toxiques au travail peut représenter pour eux un obstacle énorme et souvent insurmontable. Les États devraient veiller à ce que, lorsqu'il existe des informations indiquant qu'un travailleur a peut-être été exposé à des substances toxiques au travail et qu'il a été démontré que dans des situations similaires une telle exposition a causé un préjudice, c'est à l'employeur qu'il incombe de prouver l'absence de préjudice⁷⁹. Cela peut être particulièrement opportun lorsque les faits et les événements dont dépend le règlement d'un litige sont entièrement ou en partie sous le contrôle de l'employeur ou d'une tierce partie.

111. L'information selon laquelle un travailleur peut avoir été exposé à des substances toxiques n'a pas besoin de se présenter sous la forme de niveaux d'exposition ou d'une indication de la nature précise du produit chimique ; elle peut aussi porter sur le fait que l'on sait que des maladies professionnelles sont survenues dans tel ou tel type d'activité professionnelle ou d'industrie. L'employeur ou d'autres bénéficiaires de services devraient être habilités à tenter de réfuter la présomption de responsabilité, mais le fardeau de la preuve devrait incomber à l'employeur.

112. Un problème majeur pour les travailleurs des chaînes d'approvisionnement est que l'entreprise peut ne pas avoir suffisamment de ressources pour offrir un recours adéquat et utile aux travailleurs lésés. Les États doivent veiller à ce que les bénéficiaires de services soient eux aussi tenus d'offrir des recours. Les États ont à cet égard élaboré une législation qui couvre les circonstances dans lesquelles une

⁷⁸ ILO, *Promoting Diversity and Inclusion Through Workplace Adjustments: A Practical Guide* (Genève, 2016).

⁷⁹ S'il n'y a pas d'employeur ou si l'employeur n'est pas en mesure d'offrir un recours utile au travailleur, d'autres voies de recours doivent être mises à la disposition du travailleur.

entreprise fournit ou permet à une autre entreprise d'obtenir des avantages de quelque nature que ce soit résultant de l'exploitation de travailleurs, laquelle peut inclure l'exposition à des substances toxiques⁸⁰.

Principe 15 – Les États devraient affirmer leur compétence pour les cas transfrontaliers de préjudice causé à des travailleurs du fait de leur exposition à des substances toxiques au travail.

113. Les victimes d'atteintes aux droits de l'homme commises par des entreprises transnationales se heurtent à des obstacles particuliers dans l'accès à des recours utiles en cas d'exposition à des substances toxiques au travail. Ils ont ainsi des difficultés à prouver le préjudice subi et à établir un lien de causalité, et doivent aussi supporter les coûts financiers de l'accès à des recours dans la plupart des juridictions et au manque d'indépendance de certains systèmes judiciaires. Les États sont tenus de prendre les mesures nécessaires pour remédier à ces difficultés afin d'empêcher un déni de justice et de garantir le droit à un recours utile aux victimes d'une exposition à des substances toxiques au travail⁸¹.

114. Les États devraient veiller à ce que leurs lois prévoient la compétence de leurs tribunaux en cas d'exposition de travailleurs à des substances toxiques à l'étranger. Les États d'origine devraient faire valoir leur compétence vis-à-vis de tels abus, y compris, pour prendre, le cas échéant, des sanctions pénales. Le respect de l'obligation de rendre des comptes et l'accès aux recours dans les affaires transfrontières exigent une coopération internationale, notamment l'adoption de mesures de prévention et de divulgation de l'information.

⁸⁰ Voir, par exemple, la loi de 2015 sur l'esclavage moderne du Royaume-Uni de Grande-Bretagne et d'Irlande, première partie, art. 3, par. 5.

⁸¹ Comité des droits économiques sociaux et culturels, observation générale n° 24.

Annexe

Mapping references to the rights of workers in previous reports and selected communications of the Special Rapporteur

For over 20 years, the Commission on Human Rights, and subsequently the Human Rights Council, have mandated a special rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes (formerly the illicit movement and dumping of toxic and dangerous products and wastes) to monitor and report on the issues confronting workers in various industries around the world. These sectors include extractive industries, manufacturing, agriculture and food, the dismantling of end-of-life ships (shipbreaking) and the disposal of electronic waste and other forms of waste disposal, in both the formal and informal sectors. The present annex contains examples of cases brought to the attention of the mandate, selected from reports of and communications to the Special Rapporteur. It is envisaged that a more complete compilation will be submitted to the Council at future sessions.

<i>Report</i>	<i>References to occupational exposures</i>	<i>Challenges faced by workers</i>
“Legal framework related to the release of toxic and dangerous products during armed conflict” (A/HRC/5/5, sect. III) (2007)	<p>The report contained an overview of previous reports that illustrate impacts of workers’ exposure to toxic chemicals on human rights.</p> <p>The former Special Rapporteur’s report in 2004 highlighted the adverse impacts on the human rights of workers and communities involved in hazardous waste disposal or recycling operations of obsolete ships and electronic wastes in developing countries.¹</p> <p>The 2006 report of the former Special Rapporteur focused on chronic, low-level exposure to hazardous chemicals.² Previously the former Special Rapporteur reported on the human rights impact of hazardous chemicals from acute exposures, such as in the context of incidents of pesticide poisoning in developing countries or from catastrophes like the Bhopal disaster.</p> <p>In the 2007 report the former Special Rapporteur drew attention to the adverse effects of toxic and dangerous products in the context of armed conflicts, including on soldiers.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Disconnected efforts on occupational and environmental health • Opaque supply chains and the transfer of hazardous work • Exploitation of those most at risk

¹ E/CN.4/2004/46 and Corr.1, paras. 29-43.

² E/CN.4/2006/42.

<i>Report</i>	<i>References to occupational exposures</i>	<i>Challenges faced by workers</i>
“Mission to Ukraine” (A/HRC/7/21/Add.2) (2008, mission carried out in 2007)	<p>In relation to workers, the former Special Rapporteur was informed that workers handling toxic material (acid tars) were not informed of the materials toxicity and would unload the acid tars manually. These tars observed to be in partially exposed conditions around the grounds of the Dobrotvir power station, posing threats of exposure to the workers, their families and the communities living around the area.</p>	<ul style="list-style-type: none"> • Monitoring and enforcement gaps • Failures to realize the right to information
“Adverse effects on human rights and right to information and participation” (A/HRC/7/21, sect. III) (2008)	<p>The former Special Rapporteur noted that, because of structural conditions in many developing countries, women and the young are particularly at risk from transfers of toxic and dangerous products and wastes. Women, children and the young are often among the poorest and therefore likely to work in polluting industries and scavenge dumps of waste for reusable materials. They are also most likely to have limited access to information on waste products and to health facilities in the event of contamination. The former Special Rapporteur called for greater global attention to the gender and age dimensions of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights.</p>	<ul style="list-style-type: none"> • Exploitation of those most at risk • Failures to realize the right to information • Opaque supply chains and the transfer of hazardous work
“Mission to the United Republic of Tanzania” (A/HRC/9/22/Add.2) (2008)	<p>During a country visit to Tanzania in 2008, the former Special Rapporteur observed that workers did not use safety equipment such as gloves, dust masks, boots and glass retorts in the course of extracting and processing gold. He was particularly concerned because dangerous chemicals, mercury and cyanide, were used in the extraction process. Most of these were artisanal and small-scale miners (ASM) in the informal sector.</p> <p>The former Special Rapporteur was informed that there were instances of miners not receiving adequate information on the impact mercury can have on their health. In other cases, however, local miners were sensitized through efforts made by the Government, non-governmental organizations and through projects such as the Global Mercury Project, launched by UNIDO and the Ministry of Energy and Minerals with the support of other stakeholders. Some workers informed the former Special Rapporteur that they were aware of the dangers of using mercury and other chemicals in the extraction process; however, due to poverty and the lack of a suitable alternative, the miners were forced to continue to use mercury and other dangerous products without supervision, endangering the health of themselves, their children and their community more broadly.</p> <p>The former Special Rapporteur was concerned about the number of women and children he saw during his visits to the artisanal and small-scale mining areas. Many of the women and children were unaware of the health and safety hazards that are associated with artisanal and small-scale mining, such as mercury poisoning in the long term, amongst others. It was the case that during the processing of gold, ore is moved to the milling centres by women and children. In addition to working in harsh environments, often exposed to direct sunlight and not able to afford safety equipment, the women were sometimes subjected to threats and intimidation by other members of</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Exploitation of those most at risk • Failures to realize the right to information • Opaque supply chains and the transfer of hazardous work • Monitoring and enforcement gaps • Informal economy

Report	References to occupational exposures	Challenges faced by workers
<p>Communications sent to and replies received from Governments (see A/HRC/7/21/Add.1, Germany, Malaysia) (2006)</p>	<p>the community, especially if they were migrants.</p> <p>The presence of child labour in mining was attributed to poverty. Children were documented working in artisanal and small-scale mines in order to help the family and supplement total household income in order to buy basic goods and food. In Tanzania, child labour in the mining sites was described as common from the age of 10. The former Special Rapporteur saw children working and playing with their bare hands with toxic mercury, a particularly dangerous state of affairs as they are vulnerable to physical and chemical hazards. Mercury can cause severe damage to the developing brain, especially for developing children. The former Special Rapporteur was particularly concerned that children as young as 10 were being exposed to such highly toxic substances.</p> <p>The former Special Rapporteur regretted the lack of statistics on occupational diseases related to mining. The former Special Rapporteur was informed by the authorities, non-governmental organizations and mining associations that there was no system of recording mining-related incidents, such as accidents that occur during the processing of gold amongst others. This was particularly worrying given the fact that artisanal and small-scale miners are often some of the poorest people and are therefore unlikely to have access to health-care. The former Special Rapporteur was further informed that while many miners were aware of the toxicity and dangers of mercury poisoning as well as other chemicals that may be harmful to their health, the miners and communities do not know when deaths and illnesses are related to their work, or to other illnesses.</p> <p>On 17 July 2006, the former Special Rapporteur sent an urgent appeal regarding allegations relating to the SS Blue Lady (ex-Norway) bearing tonnes of toxic wastes such as asbestos, polychlorinated biphenyls (PCBs) and other contaminants in its structure, and which was reportedly waiting to be dismantled in Alang, state of Gujarat, India. The ship was reportedly denied entry to ship breaking yards in Bangladesh in February 2006 based on its toxic waste content. It was alleged that the ship-breaking yards in Alang lacked the possibility of protection of workers from exposure to toxic chemicals and environmentally sound management of toxic wastes. According to reports from experts, as much as 1,200 tonnes of asbestos remained in the SS Blue Lady, posing grave risks to workers and the community. The former Special Rapporteur expressed concerned with the potential human rights violations that could occur if the allegations mentioned in this communication were correct and the dismantling of the ship did indeed take place.</p>	<ul style="list-style-type: none"> • Monitoring and enforcement gaps • Exploitation of those most at risk • Informal economy • Opaque supply chains and the transfer of hazardous work • Failures to realize the right to information

Report	References to occupational exposures	Challenges faced by workers
“Shipbreaking” (A/HRC/12/26) (2009)	<p>Shipbreaking represents an important source of raw material supply and provides jobs to tens of thousands of persons. Over 95 per cent of a ship can be recycled. In principle the recycling of end-of-life vessels constitutes the best option for ships that have reached the end of their operating life, and proper facilities are available to recycle ships. However, the abhorrent working conditions and abysmal environmental protections prevailing at many shipbreaking yards in the world, and in particular in South Asian countries where ships are dismantled directly on tidal beaches, are noted to risk adversely affecting the enjoyment of several human rights, including the right to life, the right to the highest attainable standard of physical and mental health, and the right to safe and healthy working conditions, among others.</p> <p>The report notes with concern the ongoing use of these substandard shipping yards, and their unsustainable “beaching” practice, by major shipping companies around the world despite the availability of safer methods and the prohibition on such substandard practices in their home states.</p> <p>In shipbreaking yards, workers often are exposed to toxic chemicals including asbestos dusts and fibres, highly toxic industrial chemicals which have been banned for decades but are still present in ships, as well as lead, mercury, arsenic or cadmium in paints, coatings and electrical equipment. Workers are often without protective equipment to reduce exposure. Prolonged exposure to these chemicals increases the risk of developing slow-progressing but fatal diseases, which may not become apparent until many years after exposure.</p> <p>Shipbreaking activities expose workers to a wide range of workplace activities or conditions which may cause death, permanent or temporary disabilities, injuries, ill-health and occupational diseases. Long-term exposure to hazardous substances and wastes protection may also lead to serious or irreversible work-related diseases, including lung diseases, several forms of cancer and asbestos-related illnesses. Most workers are illiterate, very poor and are not aware of the health and safety risks associated with long-term exposure to these substances. Persons living in residential areas close to the yards also risk developing diseases related to the exposure to toxic and dangerous substances produced during shipbreaking activities.</p> <p>Furthermore, a great number of workers die or are seriously injured because of work-related accidents or occupational diseases related to long-term exposure to hazardous materials present on end-of-life ships. Workers do not usually receive any information or safety training. They live in makeshift facilities which often lack basic minimum requirements such as sanitation, electricity and even safe drinking water, compounding health risks of toxic exposures at work. There is a general lack of medical facilities and social protection, and injured workers or their relatives hardly receive any compensation for work-related accidents resulting in fatal injuries or permanent disabilities. In spite of an increased international awareness on the issue in past years, shipbreaking continues to be one of the most hazardous occupations in the world due to the extremely poor working practices and environmental conditions prevailing in many shipbreaking yards.</p> <p>Health and safety legislation is often not applicable to shipbreaking activities, due to the fact that</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Monitoring and enforcement gaps • Opaque supply chains and the transfer of hazardous work • Inaccessible remedies, justice and accountability • Disconnected efforts on occupational and environmental health • Failures to realize the right to information • Limited progress in prevention of exposure • Exploitation of those most at risk • Restrained freedom of association • Deliberate efforts to delay or obstruct protection from toxic exposure • Informal economy

Report	References to occupational exposures	Challenges faced by workers
	<p>it is not recognized as an industry in some countries, and this leaves workers in shipbreaking yards in a particularly vulnerable situation. Furthermore, when national labour standards are applicable, they are rarely enforced due to corruption of law enforcement officials and the lack of effective inspection mechanisms. In many shipbreaking yards, workers are not provided with personal protective equipment (PPE), such as skin, eye or lung protection, aimed at ensuring the safe handling of hazardous materials or preventing the inhalation of toxic substances. Appropriate PPE for working in specialized areas, such as respiratory protective equipment for work in conditions where there is a risk of oxygen deficiency, is also generally not available. There is usually no equipment for machine safety, fire safety, chemical safety and water safety, and when such equipment exists, it is poorly maintained. With a few exceptions, the vast majority of workers do not receive any information on the hazards or risks to health and safety, nor do they receive any training on how to minimize risks to health and safety at work.</p> <p>Due to the informal nature of working arrangements, workers are not covered by social protection schemes, and do not receive any benefit in case of injury, sickness, temporary or permanent disability in the case of occupational accidents or diseases. Injured workers or relatives of deceased workers receive hardly any compensation for work-related accidents resulting in fatal injuries or permanent disabilities. When compensation is paid, the amount received is generally much lower than the amount stipulated by the law. In case of accidents, employers usually pay for first treatment and immediate medical expenses, but not for long-term medical treatment or for expenses linked to chronic work-related diseases. If a worker is affected by an occupational disease, he is often unable to retain or find further employment opportunities in any of the yards.</p> <p>There is no written contract of employment for semi-skilled and unskilled workers. They can be fired at any time with no prior notice, and without the need to indicate any reasonable ground. The absence of job security, due to the lack of formal work contracts, and the climate of intimidation prevailing in the yards de facto prevent workers in shipbreaking yards from exercising their right to form trade unions for the promotion and protection of their economic and social interests and their right to collective bargaining.</p> <p>Semi-skilled and unskilled workers usually live in makeshift facilities built by yard owners on, or just outside, the yards. The shacks are often congested, and lack basic sanitation facilities, electricity and even drinking water. Workers are too often not provided with proper cooking or eating facilities in the yards, and are compelled to go to nearby shops and tea stalls for their food. Due to their proximity to the yard, workers continue to be exposed to toxic and dangerous substances like asbestos and hazardous fumes at their sleeping quarters.</p> <p>There are no comprehensive statistical data on persons who died or developed disabilities as a result of occupational accidents in the shipbreaking industry. The authorities rarely keep records on accidents occurring at shipbreaking facilities. In Bangladesh, for example, neither the yard owners nor public authorities appear to collect statistical data about deaths and disabilities caused by accidents at shipbreaking yards. According to media reports, more than 400 workers were killed and 6,000 seriously injured between 1985 and 2005 in Bangladesh, but NGOs estimate that</p>	

at least 1,000 people have died in Chittagong due to accidents over the last decades. When official figures exist, they appear to be largely underestimated. According to official figures, for example, there were 434 incidents at the Alang yards between 1996 and 2003, killing 209 workers; however, NGOs feared that the number of workers who died or developed disabilities as a result of work accidents may be much higher.

Through the adoption of various unfair practices, employers often conceal information about work-related accidents. Many major cases are not reported and settlements are reached with the workers secretly. In case of fatal accidents, families of the victims are usually not informed, as contractors do not use proper names or addresses of the workers and there is no monitoring or inspection of the yards.

Official and estimated figures do not include workers who died of occupational diseases related to long-term exposure to toxic and hazardous wastes and materials: the “hidden” deaths. It is virtually impossible to get any data about the number of affected workers, since the symptoms of many of these occupational diseases only appear several years after exposure, but it is estimated that a significant number of individuals died, and many others will die in the future, because of occupational diseases related to shipbreaking activities. For example, a medical study submitted to the Indian Supreme Court in September 2006 concluded that 16 per cent of the workforce handling asbestos in Alang showed symptoms of asbestosis, and was therefore at serious risk of developing mesothelioma in the future.

In relation to workers’ rights, the former Special Rapporteur encouraged States to take steps to improve their regulatory and enforcement capacities in the field of labour law and worker safety, health and welfare, so as to strengthen the protection afforded to persons employed in the shipbreaking industry. States were also encouraged to eliminate obstacles which de facto prevent workers in shipbreaking yards from exercising their freedom of association and right to collective bargaining, and set up an effective and reliable system of labour inspections, with the participation of workers’ representatives. Shipbreaking States should also take immediate steps, to the maximum of their available resources, with a view to realizing fully the right of workers to social security in the event of accidents and occupational diseases. Yard owners should take all appropriate measures, when needed through State support and international assistance and cooperation, to improve health and safety at work (inter alia by providing adequate personal protective equipment and safety training), promote better health care, housing and sanitation facilities for workers, and develop appropriate mandatory insurance schemes to protect workers in the event of accidents and occupational diseases.

In relation to data collection, the former Special Rapporteur urged ship-recycling States and yard owners to collect disaggregated statistical data on an annual comparative basis on workers who die or develop disabilities as a result of work-related accidents or occupational diseases, and make these data publicly available.

<i>Report</i>	<i>References to occupational exposures</i>	<i>Challenges faced by workers</i>
“Review of the Work and Activities” (A/HRC/15/22) (2010)	<p>The former Special Rapporteur reminded the Council of the extremely poor working practices and environmental conditions prevailing in most shipbreaking yards would continue to require the attention of the mandate holder. The former Special Rapporteur was of the view that the Convention alone is not sufficient to bring about significant improvements in the working practices prevailing in shipbreaking yards or in the elimination of the serious environmental pollution that the yards generate.</p> <p>Electronic and electrical appliances contain hundreds of different substances, many of which are highly toxic and pose significant risks to human health and the environment if they are not managed and disposed of in an environmentally sound manner. In developing countries, the vast majority of obsolete electrical and electronic equipment is dismantled in small-scale, informal workshops that separate their various components (i.e. plastic, ferrous metals, non-ferrous metals, glass) for recycling or reuse. During the process of breaking down old computers and other high-tech devices, workers are exposed to hazardous substances, including toxic heavy metals such as lead, cadmium, beryllium and mercury, hazardous chemicals, such as brominated flame retardants, and other toxic plastic additives. Furthermore, unusable parts are usually disposed of in landfills or burned, causing widespread and long-lasting contamination of soil, air and surface and groundwater resources.</p> <p>The report notes with concern the problems posed by pesticides in developing countries, due to the large number of persons employed in the agricultural sector, weak or non-existent regulatory regimes and little public awareness of the potential health and environmental harm caused by pesticide exposure. It is reported that as many as 25 million agricultural workers suffer serious or irreversible work-related diseases, including several forms of cancer, endocrine system disruption and reproductive and neurological disorders, linked to long-term exposure to hazardous pesticides.</p> <p>Lead in paint was noted as a major source of lead exposure of workers and others. Inhalation of lead-contaminated house dust is the most common exposure pathway to lead-based paint for children and adults alike. However, residential renovation and paint removal can be significant sources of lead exposure for construction workers as well as residents. Dry sanding, abrasive blasting, and burning, welding, or heating surfaces covered with lead paint typically generate highly dangerous airborne lead levels.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Monitoring and enforcement gaps • Exploitation of those most at risk • Informal economy • Opaque supply chains and the transfer of hazardous work
“Mission to Kyrgyzstan” (A/HRC/15/22/Add.2) (2010)	<p>High unemployment rates, decreases in living standards and lack of social protection force a large number of individuals to leave their villages to search for employment opportunities and a better standard of living abroad. About 400,000 citizens leave the country every year. Most choose to migrate, both legally and illegally, to Kazakhstan and the Russian Federation, where they are at risk of occupations.</p> <p>Risks to agricultural workers from obsolete, prohibited or poor quality pesticides, such as DDT manufactured in China, were noted with concern. Such highly hazardous pesticides reportedly continued to be illegally imported into, and exported out of, the country due to the lack of</p>	<ul style="list-style-type: none"> • Exploitation of those most at risk • Inadequate standards of protection • Monitoring and enforcement gaps

Report	References to occupational exposures	Challenges faced by workers
“Mission to India” (A/HRC/15/22/Add.3) (2010)	<p>adequate controls at the borders with China and Tajikistan. Such highly hazardous pesticides were noted as being frequently unlabelled, or are labelled with information that farmers or agricultural workers cannot read either because they are not in the worker’s local language or because of insufficient literacy.</p>	<ul style="list-style-type: none"> • Failures to realize the right to information
	<p>Studies showed accumulation of highly toxic mercury in various tissues and parts of the body (hair, blood, urine) of workers and other persons analysed. Maximum levels were registered among workers employed in the mercury plant. High concentrations of mercury were also observed in children’s blood and in the milk of nursing mothers. Although no comprehensive study was then carried out to assess the extent of mercury contamination, elevated mercury concentration, often exceeding maximum allowable concentration norms, have been recorded in air and water resources in areas surrounding large enterprises that are currently producing or had produced mercury in the Batken and Osh oblasts.</p>	
	<p>Information on chemical products sold in the country should be available, accessible, user-friendly, adequate and appropriate to the needs of all stakeholders. People handling hazardous chemicals, such as farmers and employees in the chemical or energy sector, should receive appropriate information and training on such chemicals and their intrinsic properties, and on how to use them in ways that minimize adverse health consequences.</p>	
	<p>The purpose of the visit was to examine the progress made, and the difficulties encountered, by the country in implementing its obligations under human rights and environmental law to ensure the sound management and disposal of hazardous products and wastes. In particular, the aim of the mission was to gather first-hand information on the adverse effects that hazardous activities, such as shipbreaking and the recycling of electrical and electronic waste (e-waste), have on the enjoyment of human rights of the countless individuals working in these sectors or living close to the places where these activities take place.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Monitoring and enforcement gaps • Opaque supply chains and the transfer of hazardous work • Exploitation of those most at risk • Failures to realize the right to information • Limited progress in prevention of exposure • Informal economy
	<p>Despite some progress noted, the former Special Rapporteur identified a number of key challenges. National legislation on waste management and health and safety at work was not effectively implemented, and the current institutional framework appeared inadequate to respond to the challenges posed to worker and others by the generation, management, handling, transport and disposal of toxic and dangerous products and wastes. The health and safety situation prevailing at the shipbreaking yards continued to remain critical, especially in Mumbai, where the working conditions and the quality of facilities remain highly inadequate for guaranteeing health and safety at work and an adequate standard of living for those employed in the shipbreaking sector.</p>	
	<p>Shipbreaking was noted to be of grave concern, noting that during the dismantling process, workers are exposed to a wide range of hazardous workplace activities, such as entry into confined, enclosed or other dangerous atmospheres, paint removal, oil/fuel removal and tank cleaning, which may cause death, permanent or temporary disabilities, and injuries. Furthermore, long-term exposure to toxic and hazardous substances and materials which may be present on ships sent for dismantling, such as asbestos, polychlorinated biphenyls (PCBs), heavy metals in</p>	

Report	References to occupational exposures	Challenges faced by workers
	<p>paints, oils and oil sludge, may lead to serious or irreversible work-related illnesses and diseases, including lung diseases, several forms of cancer and asbestos-related illnesses.</p> <p>At the time of the former Special Rapporteur's visit, the 128 yards that were operational provided employment to about 30,000 workers. In addition, over 500,000 workers were employed in associated downstream industries, such as re-rolling mills, foundries, scrap-handling yards, local goods stores and other small businesses.</p> <p>Most of the shipbreaking workers at Alang/Sosiya and Mumbai were migrant workers coming from poorer, less industrialized states of the Union, such as Uttar Pradesh, Orissa and Bihar. Many workers would go back to their villages for three to four months a year, usually during the monsoon season, to work in agriculture, likely exposed to a different type of occupational toxic substances. It was a largely uneducated workforce, relatively young (19-45 years old) and mostly male. Most of the workers are either illiterate or have attended primary levels of schooling. A large percentage of workers are married, but only 20 per cent of them live with their families.</p> <p>The former Special Rapporteur noted the development of training opportunities for some workers. The Safety Training and Labour Welfare Institute, established in 2003 in Alang, provided a number of training programmes, seminars and workshop aimed at raising awareness on the risks associated with ship-dismantling activities and on the measures to adopt to minimize such risks. From 2003 to 2009, some 49,000 workers participated in training activities at the Institute. The "basic safety for all" programme was compulsory for all workers in the yards. The former Special Rapporteur also noted the progressive introduction and use of basic PPEs, such as helmets, gloves and goggles, reportedly contributing to the reduction in the number of serious accidents resulting in death or disabilities. The Special Rapporteur welcomed the efforts made by the local authorities and the shipbreaking industry to improve the health and quality of life of workers and their families in Alang/Sosiya.</p> <p>Notwithstanding these positive developments, the health and safety situation prevailing at the shipbreaking yards continued to remain critical, as witnessed by the 12 fatal accidents that occurred in Alang/Sosiya during the course of 2009, and there are a number of identifiable shortcomings which need to be addressed. The former Special Rapporteur was particularly concerned about the quality of infrastructure facilities in Mumbai, which continue to be highly inadequate for guaranteeing health and safety at work and an adequate standard of living for those employed in the shipbreaking sector.</p> <p>The informal nature of shipbreaking activities hampers the effective implementation of national labour standards aimed at guaranteeing job security and just and favourable conditions of work. There is no written contract of employment. Workers were hired either on a monthly basis or for a specific task on a vessel. They regularly change plots, depending on the arrival of ships and workload. Workers were paid monthly, usually at the daily rate. The average daily rate is 250 rupees a day (about US\$ 5). Working hours are from 8 a.m. to 5 p.m., but reportedly there is a two-hour compulsory overtime every day until 7 p.m. in most yards. Workers can be fired at any</p>	<ul style="list-style-type: none"> • Restrained freedom of association • Inaccessible remedies, justice and accountability

time with no prior notice and with no reasonable ground.

The former Special Rapporteur considered that the absence of a written contract of employment, and the possibility of dismissal overnight, are at the core of the vulnerability of shipbreaking workers, and de facto prevent the full and effective enjoyment of the core labour rights enshrined in articles 6, 7 and 8 of the Covenant.

With a few exceptions, the vast majority of the workforce in Mumbai do not receive any information on the hazards or risks to health and safety, nor do they receive any training on how to avoid or minimize them. With regard to safety training, the former Special Rapporteur was of the view that existing training opportunities in Alang/Sosiya should be improved, considering the magnitude of the risks associated with shipbreaking activities and the hazardous substances workers are potentially exposed to. In Mumbai, workers do not receive any formal training from their employers, which makes them more prone to serious accidents and injuries. As far as PPEs are concerned, the former Special Rapporteur regrets that not all the workers in Mumbai receive helmets, gloves and goggles, and that only a fraction of them actually use them during work.

Due to the informal nature of working arrangements, workers are not covered by social protection schemes, and do not receive any benefit in case of work-related injuries or diseases. The compulsory insurance that the industry is required to have covers only death and permanent disabilities. In cases of minor accidents, employers usually pay for first aid and immediate medical expenses, but not for long-term medical treatment or for expenses linked to chronic work-related illnesses. Workers do not usually receive any wages or benefits when absent from work on medical grounds.

Health facilities in Alang/Sosiya do not possess sufficient human, technical and financial resources to provide any treatment other than first aid for minor injuries. The nearest hospital equipped to deal with life-threatening conditions is in Bhavnagar, more than 50 kilometres away. The Red Cross hospital in Alang, which the former Special Rapporteur visited, can count on only four medical doctors and nine beds to provide health care not only to some 30,000 workers in the yards, but also to the neighbouring villages of Alang (which has a population of about 18,000 people) and Sosiya (4,000 people). In Mumbai the situation is even worse, with no permanent facilities except first aid and ambulance services.

The former Special Rapporteur notes with concern that most workers, but reportedly also a number of yard owners, are not aware of the serious life-threatening work-related diseases which may result from long-term exposure to toxic and hazardous substances and materials present on end-of-life ships. In particular, it appears that the majority of the workforce and the local population do not know the adverse consequences of prolonged exposure to asbestos dusts and fibres and are not familiar with the precautions that need to be taken to handle asbestos-containing materials.

Report	References to occupational exposures	Challenges faced by workers
“Medical Waste” (A/HRC/18/31) (2011)	<p>The former Special Rapporteur also reported on the situation of workers handling electronic waste (e-waste). The term “e-waste” is generally used to describe obsolete, broken or discarded appliances using electricity, such as computers, mobile phones and household appliances. E-waste may contain a number of hazardous substances, which can be released in the workplace and in the surrounding environment during the separation and recovery process.</p> <p>At the time, it appeared that only 3 to 5 per cent of e-waste is recycled in authorized recycling facilities. The vast majority of electrical and electronic equipment (EEE) was collected, dismantled and processed in the informal sector by some 80,000 workers, including women and children, who earn their livelihood by breaking down old computers and other high-tech devices to recover precious metals such as gold, copper and silver. The work is done largely by hand, using rudimentary techniques. Workers recovering glass by hammering cathode ray tubes or heating PCBs to remove capacitors are a common sight in most workshops dismantling e-waste. Workers did not use any protective gear to guard against hazardous substances released during the breaking of obsolete EEE. The Delhi area is the main hub for informal recycling of e-waste in India, with about 25,000 workers engaged in the various stages of the process. The recycling business is based on a network of collectors, traders and recyclers. Each phase of the process adds value to the materials and creates job opportunities for a great number of people. The e-waste market was not centred in one main area, but spread around different zones, each handling a specific stage of the process (for example storage, component separation, plastic shredding, acid processing/leaching, open burning and residue dumping).</p> <p>At the time, legislation on waste management has not proved effective in informal sectors, and was regarded as not providing sufficient protection for the estimated 80,000 persons working in the informal e-waste recycling sector and their families. The failure to incorporate the informal sector into Government strategies on the sound management and disposal of e-waste constitutes, in the former Special Rapporteur’s view, a violation of the obligations undertaken by the State under articles 6, 7 and 11 of the International Covenant on Economic, Social and Cultural Rights. The former Special Rapporteur is concerned about the extremely dangerous recovery processes and techniques used in the informal e-waste recycling sector and their adverse effects on the right to health of those employed in small-scale informal workshops. Such health-threatening practices include the physical breaking of hazardous components, open-air incineration and acid leaching to extract gold and copper, and the melting of lead. Most of these activities involve physical dismantling by bare hands and basic tools. Workers were observed to not use any protective gear to prevent exposure to the hazardous substances contained in EEE; indeed, most of them possessed very little or no knowledge of the risks associated with the handling of these hazardous substances or the precautions to use to minimize their adverse health effects.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Exploitation of those most at risk • Opaque supply chains and the transfer of hazardous work • Disconnected efforts on occupational and environmental health • Informal economy • Failures to realize the right to information
	<p>Each type of hazardous medical waste presents hazards that jeopardise the enjoyment of human rights by workers and others. The 2011 thematic report contained several examples of the adverse impact that the improper management and disposal of medical waste continue to have on the enjoyment of human rights in many countries.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Exploitation of

Report	References to occupational exposures	Challenges faced by workers
	<p>All individuals exposed to health-care waste are potentially at risk of being injured or infected, including medical staff: doctors, nurses, sanitary staff and hospital maintenance personnel; workers in support services linked to health-care facilities such as laundries, waste-handling and transportation services; and workers in waste-disposal facilities, including scavengers.</p> <p>While all persons exposed to hazardous medical waste are at risk of health impacts, the main occupational groups at risk include hospital personnel, workers handling and transporting waste, persons working at waste disposal facilities, and scavengers. In many developing countries, nurses and (to a lesser extent) doctors do not receive adequate information on the hazards associated with the unsafe handling of hazardous medical waste, nor do they receive any training on how to eliminate, or reduce to a minimum, such hazards. Medical personnel often receive limited instructions on the use of personal protective equipment, and are not aware of safety emergency procedures for dealing with spillages (for example, when mercury-containing equipment breaks) and accidents. In some health-care establishments, staff members are not vaccinated against common infectious diseases, such as tetanus and hepatitis. Hospital cleaners and waste handlers are in an even more vulnerable position than the medical staff that produce the waste. An increasing number of them are employed by external contractors rather than being directly employed by the hospital, and may not receive any information on the occupational risks to which they are exposed and on the correct procedures for handling, loading and unloading waste bags and containers. They are often poorly educated, and often do not receive any vaccinations or proper personal protective equipment. Disposable latex gloves may be provided, but they are usually thin and offer little protection. In many health-care establishments, it is not uncommon to see medical waste being transported by hand in bin bags, risking spills of toxic or infectious liquids, or staff injuries from protruding needles or other sharp objects.</p> <p>Like hospital cleaners and waste handlers, operators of small-scale medical waste incinerators, garbage collectors and people working in municipal waste facilities, where large amounts of medical waste are mixed and disposed of with general household waste, are unlikely to receive proper training on the risks associated with the handling of hazardous medical waste or protective clothing, including gloves against needle-stick injuries. They do not usually receive any vaccinations against common infectious diseases.</p> <p>Untreated medical waste can reach the recycling industry by a number of routes. In many developing countries, where hospitals have no recycling programmes, staff at healthcare facilities often sell medical waste to waste recyclers in order to supplement their incomes. This practice allows for the reuse and recycling of a large amount of non-hazardous hospital materials, such as empty bottles and containers or aluminium from vial caps. Other materials, such as syringes, blood bags or laboratory waste, are, however, extremely hazardous, and the practice puts whoever processes these products at risk. Waste recyclers usually have no formal education and possess very little or no knowledge of the risks associated with the handling of hazardous substances or the precautions to adopt to minimize their adverse health effects. They usually use no protective gear to prevent them from exposure to the hazardous substances contained in medical waste.</p>	<p>those most at risk</p> <ul style="list-style-type: none"> • Failures to realize the right to information • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Informal economy • Disconnected efforts on occupational and environmental health • Inaccessible remedies, justice and accountability

Report	References to occupational exposures	Challenges faced by workers
	<p>Medical waste is also sought out by scavengers, who put themselves at great risk by collecting it. In some countries, scavengers are often seen in hospital grounds, while others collect waste from municipal dumps or at illegal landfills. In December 2007, for instance, a large number of scavengers, mainly children, were suspected to have contracted hepatitis C as a result of needle-stick injuries during the collection of used syringes and other clinical waste for recycling. Even in countries where there is less of a recycling industry, the practice of mixing medical waste with ordinary garbage exposes scavengers to a number of infectious diseases, such as hepatitis and tetanus, and to physical risks associated with the handling of infected needles and broken glass.</p> <p>Information on the hazards associated with the handling of hazardous medical waste, access to training opportunities on the safety procedures to minimize hazards, and proper personal protective equipment were noted to constitute essential preconditions for the enjoyment of the right to safe and healthy conditions of work. In many health-care establishments around the world, the lack of adequate waste management plans to ensure the safe and environmentally sound segregation, collection, transport, treatment and disposal of medical waste continue to expose a significant number of people from a wide range of occupations to the risk of injury and illness.</p> <p>The report notes that WHO has elaborated a number of policy, management and advocacy tools to minimize the risks that the improper management of health-care waste pose to health-care workers, patients, waste handlers, the community at large and the environment, and to facilitate the establishment and sustained maintenance of a sound system of health-care waste management.</p> <p>In most developing countries and economies in transition, the lack of adequate technical resources for the safe and sound management of health-care waste, the limited funding for health-care waste management and the inadequate awareness of the direct and indirect risks posed by health-care waste constitute the main obstacles to the development of a comprehensive regulatory framework on health-care waste management and to its effective implementation.</p> <p>The former Special Rapporteur recommended that States strengthen their legal framework on hospital hygiene and occupational health and safety, and provide adequate human, technical and financial resources to national authorities responsible for its enforcement. He also recommends that health authorities organize educational programmes and training opportunities to raise awareness about health, safety and environmental protection issues relating to medical waste management.</p> <p>In view of the fact that persons working within and outside health-care establishments often receive limited information and training opportunities on the occupational risks to which they are exposed and on the correct procedures for handling waste in a safe manner, the former Special Rapporteur urged relevant national health authorities to include waste management in the curricula of future medical practitioners and nurses, to provide appropriate information on the occupational risks to which medical and paramedical staff may be exposed, and to organize training opportunities on safe health-care waste management for staff handling medical waste.</p>	

Report	References to occupational exposures	Challenges faced by workers
	<p>The former Special Rapporteur called on health-care establishments to take all appropriate measures to improve health and safety conditions for those handling medical waste in and outside health-care establishments. Such measures should include: (a) Access to information on the specific occupational risks to which different categories of workers are exposed, and the safety measures to minimize such risks; (b) The provision of appropriate personal protective equipment for persons handling hazardous health-care waste; (c) Access, on a voluntary basis, to vaccination against such common infectious diseases as tetanus and hepatitis; (d) The organization of training opportunities and safety workshops designed for and targeting different categories of hospital personnel (such as medical doctors, nurses, hospital cleaners and waste handlers); (e) Regular drills in emergency prevention, preparedness and response procedures.</p> <p>The former Special Rapporteur recommended a number of principles be taken into account while drafting and implementing such health-care waste management plans, some of which relate to the protection of workers in the healthcare sector from exposure to hazardous substances and wastes:</p> <p>Prevention/minimization of hazards — The former Special Rapporteur called on States, healthcare facilities and the private sector to take all appropriate measures, including educational programmes and improved production processes, to ensure that the generation of hazardous medical waste is reduced to a minimum. Hospitals should, whenever feasible, replace hazardous chemicals/products (for example, mercury-containing devices) or disposable instruments (such as scissors and kidney dishes) with alternative products or reusable products. Prescription practices should also be changed so that unnecessary injections in cases where effective oral medical is available may be avoided.</p> <p>Packaging and labelling — The use of internationally recognized symbols and signs is essential to ensure the safe handling of hazardous waste. A common system of labelling and coding of packaging should be used in all health-care establishments and be part of the waste management instructions for hospital workers who handle hazardous waste. Medical waste should be packaged in resistant and sealed bags or containers to prevent spilling during handling and transportation. If shipped abroad for treatment, medical waste should be labelled in accordance with international agreements (such as the Basel Convention).</p> <p>Handling, transportation and storage — Medical waste should be handled and transported in such a way as to prevent unnecessary exposure to staff and others. Handling and transportation should be minimized to reduce the likelihood of exposure to the waste. Medical waste should be held in storage areas that are identified as containing infectious waste. Such areas should always be fitted with a lock in order to prevent access by unauthorized persons.</p>	
<p>“Mission to Poland” (A/HRC/18/31/Add.2) (2011)</p>	<p>The former Special Rapporteur noted with concern that national authorities responsible for monitoring compliance with national legislation including in relation to health and safety at work frequently lacked adequate human, technical and financial resources to carry out their monitoring functions adequately. Small and medium enterprises were inspected only once every four years, and only big industrial and agricultural enterprises were subject to more regular controls. The former Special Rapporteur recommended that Poland allocate adequate human, technical and</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Monitoring and

Report	References to occupational exposures	Challenges faced by workers
“Human rights and Extractive Industries” (A/HRC/21/48) (2012)	financial resources to the various agencies responsible for enforcing and monitoring compliance with national legislation on environmental protection, waste and chemicals management, and health and safety at work.	enforcement gaps
	The former Special Rapporteur shared the concerns expressed by the Committee on Economic, Social and Cultural Rights that that Poland had not at the time taken the necessary measures to ensure that the Covenant is given full effect in its domestic legal order. In this regard, the Special Rapporteur noted that some of the economic and social rights enshrined in the Constitution, including the right to safe and healthy working conditions and the right to a healthy environment, could not be directly invoked before national courts and tribunals.	<ul style="list-style-type: none"> • Failures to realize the right to information • Limited implementation of ILO instruments
	The former Special Rapporteur noted that Poland was not a party to a number of ILO conventions on health and safety at work, and called on the Government to consider ratifying these conventions, in particular the Convention concerning Occupational Safety and Health and the Working Environment, 1981 (No. 155) and the Convention concerning the Prevention of Major Industrial Accidents, 1993 (No. 174).	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Exploitation of those most at risk • Informal economy
	The report surveys the human rights impacts to workers engaged in mining from exposure to hazardous substances. Mining is considered one of the world’s most dangerous occupations. Workers are exposed to intense heat, toxic substances and fumes, unstable geological structures and intense sounds. Inadequate safety protocols in the handling, storing and disposal of toxic substances are contrary to international human rights treaties protecting the right to safe and healthy working conditions. For example, more significant health effects have been found among uranium miners who are exposed to high levels of radon. A well-known and potentially fatal respiratory disease affecting extractive industry workers is coal worker’s pneumoconiosis, or black lung disease, which causes the lungs to inflame and stiffen from scarring. Another potentially debilitating and fatal outcome of exposure to coal dust is silicosis. Disturbingly, up to 12 per cent of coal miners develop these two deadly diseases.	
	Despite increasing global consensus of the dangers of mercury, the former Special Rapporteur expressed concern that miners and their families are still exposed to this hazardous substance and neurotoxin; miners in Brazil, Colombia, Guyana, Indonesia, the Philippines, United Republic of Tanzania and Zimbabwe were recorded with mercury levels of up to 50 times above the limits set by the World Health Organization (WHO).	
	A study by the National Institute for Occupational Safety and Health (NIOSH) and the National Cancer Institute of the United States of America showed a direct relationship between diesel exhaust and lung cancer. Underground miners are exposed to over 100 times the background concentrations of diesel exhaust, and the use of diesel-fuelled equipment is growing in the mining community. Not surprisingly, the study found that underground miners, who have the greatest exposure to diesel exhaust, have a higher lung cancer mortality rate than surface miners, as well as elevated oesophageal cancer and pneumoconiosis.	
	In most cases, children working in extractive industries constitutes one of the worst forms of child	

labour. The 2012 report notes ILO estimates that one million children worldwide are involved in mining and quarrying, and often with little or no pay; UNEP estimates put that number at between one million and two million. Children as young as 3 years work in dangerous conditions which expose them to hazardous substances, including mercury, lead and cyanide. The mines are often too remote to have regular labour inspections, and they do not have unionized workers, resulting in the so-called “frontier communities” where traditional social structures of society and ethical value systems have broken down.

Mercury intoxication has been called an epidemic among children working in gold mines. The report notes that one-fifth of the children covered by an International Labour Organization (ILO) survey reported having a health problem since they took up gold mining, primarily aches in limbs and backbone, kidney and urinary tract diseases and exhaustion. In one country, over 400 children under the age of five reportedly died due to lead poisoning associated with gold miners grinding lead-containing rock at home in order to extract the gold, and leaving lead dust on the floors where children crawl. Health risks related to exposure to hazardous substances is exacerbated by children’s inclinations to more hand-to-mouth behaviour as well as the fact that personal protective equipment (PPE) is invariably made in adult sizes.

Impacts on maternal health from exposure to hazardous substances, especially during the already immune-challenged gestation period, was also noted. The former Special Rapporteur expressed alarm at the discovery of elevated mercury levels in the breast milk of mothers in several countries. He expressed concern that this may diminish the rights of infant children, reduce the practice of breastfeeding and increase the likelihood for women of diseases associated with exposure to these substances.

The report notes how women experience the impacts of artisanal and small-scale mining (ASM) differently, either because of their sex — their biological characteristics as a female —, but more often because of their gender — their sociocultural definition as women. The former Special Rapporteur emphasizes that due to the harmful effects of mercury on the female reproduction function, international human rights law requires States parties to put in place preventive measures and programmes to protect women of childbearing age from mercury exposure.

The former Special Rapporteur expressed concern about the extent of child slavery and child labour in the mining and quarrying industries and the impact on children as they face the same risks as adults, but lack the strength and judgment to protect themselves from sexual, moral, social and physical harm, including death and injuries resulting in disabilities. Poverty, lack of access to education, insufficient or non-existent legal frameworks, trafficking and debt bondage have been identified as root causes, manifestations and aggravating factors that lead to child slavery in the mining and quarrying sector. The former Special Rapporteur observed that unaccompanied minors are more likely to be exposed to harmful substances for want of parental protection in already exploitative environments.

Report	References to occupational exposures	Challenges faced by workers
	<p>The report notes several International Labour Organization (ILO) conventions concern the occupational hazards facing workers in extractive industries.³</p> <p>Despite the robust and varied protection offered by the ILO conventions, the former Special Rapporteur stressed what he considered their three primary shortcomings. First of all, the lack of widespread ratification (ranging from 6 to 57 countries) of these conventions means that global commitment to the full extent of the standards articulated is difficult.</p> <p>Secondly, implementation remains a substantial problem in States that have ratified some or all of these conventions. Indeed, several States parties to Convention No. 169 fail to adequately consult indigenous peoples prior to development and promotion of an extractive undertaking, despite the requirement under the Convention to establish or maintain procedures for consultation with affected indigenous communities, “with a view to ascertaining whether and to what degree their interests would be prejudiced, before undertaking or permitting any programmes for the exploration or exploitation of such resources pertaining to their lands” (art. 15, para. 2). With regard to asbestos extraction, Convention No. 162 has been somewhat successful in reducing asbestos extraction and consumption around the world from an estimated 4.73 metric tons in 1980 to about 2.11 metric tons in 2003. However, despite the adoption of the resolution concerning asbestos in 2006, which endorsed the “elimination of future use of asbestos,” extraction and use of asbestos remains alarmingly high (in some cases, production has increased), including in countries that have ratified the Convention.</p> <p>Thirdly, the obligations contained in the conventions are often inadequate to address the problems related to hazardous wastes. For example, Convention No. 169 only requires consultation with affected indigenous and tribal peoples in decision-making on the extraction of natural resources</p>	<ul style="list-style-type: none"> • Limited implementation of ILO instruments

³ Convention No. 148 concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration states that, “as far as possible, the working environment shall be kept free from any hazards due to air pollution, noise or vibration.”³³ • Convention No. 155 concerning Occupational Safety and Health and the Working Environment requires parties to establish a coherent national policy on occupational safety and health in order to improve working conditions. • Convention No. 162 concerning Safety in the Use of Asbestos obligates States parties to prescribe measures to protect workers from exposure to asbestos, including partial or total bans on future asbestos use, and thus its extraction; proper asbestos waste disposal; inspection and monitoring procedures of working conditions; and providing information on the hazards of asbestos to workers. • Convention No. 170 concerning Safety in the Use of Chemicals at Work compels States parties to protect workers from exposure to hazardous chemicals. Employers in States parties to the Convention are obligated to classify and identify hazardous chemicals so as to ensure that workers are not exposed to hazardous chemicals in excess of exposure limits, and to minimize risk. • Convention No. 174 concerning the Prevention of Major Industrial Accidents obligates States parties to “formulate, implement and periodically review a coherent national policy concerning the protection of workers, the public and the environment against the risk of major accidents” (art. 4) and “establish a comprehensive siting policy arranging for the appropriate separation of proposed major hazard installations from working and residential areas and public facilities” (art. 17). • Convention No. 176 concerning Safety and Health in Mines establishes standards for all mining operations, excluding oil and gas extraction. Parties to the convention must consult with representatives of employers and workers to formulate a policy on safety and health in mines consistent with the minimum standards set out in the Convention. 34 • Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries recognizes the need for special safeguards of the rights of indigenous peoples to the natural resources, including mineral or sub-surface resources, pertaining to their lands, including the right to participate in the use, management and conservation of these resources and in the benefits of their extraction. 62.

Report	References to occupational exposures	Challenges faced by workers
	<p>and only provides for compensation for damage from harms caused by such extraction rather than mitigation, which could be accomplished through a robust free, prior and informed consent procedure. Likewise, the other conventions mentioned above contain critical qualifiers to obligations based on “national conditions and practice” which can result in reduced standards in some countries on the grounds that they lack the resources to meet obligations under one or more conventions.</p>	
<p>“Preliminary and scoping report” (A/HRC/24/39) (2013)</p>	<p>The report notes that, unlike most other areas of international environmental law, there is neither a framework Convention nor a comprehensive global regime on the regulation of toxic chemicals and wastes. Fewer than 30 of thousands of toxic substances are regulated through their lifecycle under international conventions.</p> <p>The report notes that the impact of substances on human health and the environment can be reduced by limiting or prohibiting the use of these substances in certain industrial processes, where substitutes or alternative processes exist. These restrictions were first designed to protect the health of workers. For example, the ILO adopted a Convention prohibiting the use of certain pigments of lead in industrial paint to prevent the exposure of workers to the risk of lead poisoning. In 1971, another Convention was adopted by the ILO to restrict the use of benzene or products of benzene in certain industrial activities, while demanding the replacement of these carcinogens produced by less harmful substitutes.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Disconnected efforts on occupational and environmental health • Limited implementation of ILO instruments
<p>“Mission to Hungary” (A/HRC/24/39/Add.1) (2013)</p>	<p>In Hungary, when a reservoir containing red sludge collapsed, the most serious immediate effects were caused by the high alkalinity (pH 13+) of the sludge. The people of Devecser and Kolontár experienced serious first- and second-degree chemical burns to the skin; respiratory problems were also documented. In addition, the health of some 4,000 volunteers and rescue workers were similarly affected. The former Special Rapporteur attached great importance to the issue of occupational health during rescue operations, and reiterated the recommendation of WHO that personal protective equipment should be selected on the basis of the hazards identified, the protective qualities of the equipment and its suitability for the tasks performed. The former Special Rapporteur was concerned by information he received indicating that there are no special protocols for the rescue of children, the elderly, persons with disabilities or other persons in need of protection in the training programme developed for disaster management forces in Hungary.</p> <p>The former Special Rapporteur recommended that the Government of Hungary: (a) Consider accession to the Protocol on Liability and Compensation for Damage resulting from Transboundary Movements of Hazardous Wastes and their Disposal and to contribute to its entry into force; (b) Consider ratifying the ILO Chemicals Convention, 1990 (No. 170) and the Prevention of Major Industrial Convention, 1993 (No. 174) to strengthen the framework for occupational safety. The former Special Rapporteur also recommended among other measures that the Government of Hungary in the mining law place emphasis on provisions that provide for meaningful engagement with affected communities and for the safety of workers, especially those dealing with harmful substances; and ensure that impact assessments use reliable baseline studies for both environmental contaminants and human health conditions, and are carried out by</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Monitoring and enforcement gaps • Exploitation of those most at risk • Disconnected efforts on occupational and environmental health • Failures to realize the right to information • Limited implementation of ILO instruments

Report	References to occupational exposures	Challenges faced by workers
“Right to information on hazardous substances and waste” (A/HRC/30/40) (2015)	<p>competent authorities to ensure an environmentally sound reflection of the impact of contaminants on the environment and human health of proposed developments.</p> <p>The Special Rapporteur’s report describes the rights of workers and others in relation to right to information. The report contains obligations of States and responsibilities of business enterprises in relation to the right to information. It clarifies that information on hazardous substances should be available, accessible and functional for everyone, consistent with the principle of non-discrimination, in order for States to meet their human rights obligations and businesses their corresponding responsibilities.</p> <p>The Special Rapporteur noted with concern that workers are exposed to above-average levels of hazardous substances, with regular reports of inadequate training and adverse health impacts from preventable accidents and occupational exposure. The Special Rapporteur also noted the right of workers to remove themselves from situations they believe are hazardous, which is contingent on information about the known and unknown risks of the substances to which they are exposed.</p> <p>The reports notes that in order to protect those most at risk, States must ensure that disaggregated information is available and accessible regarding the risks of hazardous substances to various population groups, such as workers, children or pregnant women. Similarly, the information should be monitored and disaggregated by sex and population group, such as workers in industries with exposure to hazardous substances, low-income communities, indigenous peoples or minorities, or other groups who are at high risk of adverse impacts. In addition, States must ensure information flows effectively to communities at risk to enable them to be aware of risks and options to prevent harm.</p> <p>Disaggregated information on adverse effects linked to hazardous substances, such as cancer, can help to identify those at risk of disproportionate impacts, and help to provide an effective remedy. In addition, bio-monitoring initiatives can also help to provide disaggregated information, for example on hazardous substances in mother’s breast milk passed onto children.</p> <p>To help overcome the challenge of making information accessible to workers and others at risk, a long-standing tool nationally and internationally is classification and labelling. These laws help to ensure businesses, workers and the public have access to information about the risks associated with hazardous substances in the workplace. To this end, States have pledged to implement “hazard communication mechanisms”,⁴ such as the Globally Harmonized System of Classification and Labelling of Chemicals, and to use safety data sheets. Training of workers is required for these tools to work effectively.</p>	<ul style="list-style-type: none"> • Failures to realize the right to information

⁴ SAICM, Overarching Policy Strategy (see footnote 13 above), para. 15 (b) (ii).

Report	References to occupational exposures	Challenges faced by workers
<p>“Impact of Toxics and Pollution on Children’s Rights” (A/HRC/33/41) (2016)</p>	<p>The illegal use of banned pesticides and toxic chemicals, as well as of counterfeit products, continues to be a major problem globally, a serious threat to children of the workers affected, to communities and to consumers. Tens of millions of children are engaged in hazardous work, where they are often exposed to toxic chemicals. For example, children around the world continue to work in artisanal and small-scale mines, where they are exposed to mercury and other toxic chemicals. The United Nations Children’s Fund (UNICEF) has estimated that 40,000 children toil in mines, extracting a known carcinogen (cobalt) to be used in cell phones, laptop computers and cars by companies that undoubtedly have resources for human rights due diligence. Children working in agriculture continue to use hazardous pesticides despite the bans on such products in several countries, raising questions of double standards and discrimination.</p> <p>Childhood exposure to toxics occurs without the child’s (or parent’s) consent. Even if a parent were somehow able to identify every product and possible source of exposure to toxics that might harm their child, they are often powerless to do anything about it, particularly when it involves food, water or air pollution. Young children lack the physical and/or mental ability to vocalize opinions and understand the dangers and potential consequences of toxics until long after harm has been inflicted. This, for example, is why children are not allowed to buy cigarettes or alcohol until a certain age in many countries and are prohibited from working in hazardous conditions.</p> <p>As parents’ exposure to toxic chemicals can affect the development of the child, this is inextricably linked to the realization of several rights of the child. Cases of children born with disabilities because their mothers worked with toxic chemicals before or during pregnancy, or harmed by toxic residues brought into the home from work (“take-home exposures”) by their parents or others illustrate the importance of protecting not only women and girls of reproductive age, but the population at large.</p> <p>Examples of addressing certain sources of exposure to toxics by young children include the European Union directive on the safety of toys, which prohibits the presence of substances in toys that are classified as carcinogenic, mutagenic or toxic for reproduction, and United States legislation to protect children working on tobacco farms from toxic pesticides.¹⁰¹ Globally, a new treaty on mercury pollution holds promise, but only addresses one element of a much larger problem. States and businesses still have a long way to go.</p> <p>The importance of upstream prevention is illustrated by the case of children working in cobalt mines in the Democratic Republic of the Congo. Reports describe children in Indonesia and Peru poisoned by mercury and suffering from birth defects due to small-scale gold mining. Companies that purchase or invest in such commodities have a responsibility to ensure that child rights are not violated as a result of their demand.</p> <p>At the tail end of industrial activity, children are far too often found working at toxic waste dumps, burning plastics and cables to recover and recycle precious metals. Electronic waste (e-waste) is of particular concern. Children, sometimes as young as five, are involved in manual dismantling and burning of electronic products at e-waste sites in Africa, Latin America and Asia. Some are described as being among the most polluted places on earth. Infants living near waste</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Exploitation of those most at risk • Deliberate efforts to delay or obstruct protection from toxic exposure • Opaque supply chains and the transfer of hazardous work • Disconnected efforts on occupational and environmental health • Failures to realize the right to information • Inaccessible remedies, justice and accountability • Informal economy

Report	References to occupational exposures	Challenges faced by workers
<p>“Mission to Republic of Korea” (A/HRC/33/41/Add.1) (2016, mission carried out in 2015)</p>	<p>disposal sites, due to their hand-to-mouth behaviour, are among the most vulnerable groups, as soils and dusts are generally contaminated with lead and other toxics. In Latin America, many of these recycling and recovery operations take place in communities, not in clearly defined waste dumps. Children are found with record levels of toxic chemicals in their bodies at such waste sites. Young girls, still developing and approaching the age of reproduction, work as collectors or vendors in highly toxic environments. At La Chureca in Managua, Nicaragua, approximately half of all waste pickers were less than 18 years old. 134 In Guiyu, China, about 80 per cent of children suffer from respiratory diseases, and there has been a surge in cases of leukaemia and concentrations of lead in blood are high.</p> <p>The Special Rapporteur offered various recommendations to stakeholders to protect the rights of the child from toxic chemicals, including that:</p> <p>States should eliminate work by children where they are exposed to toxics and ensure safer alternative employment, and monitoring of children affected. States should ensure that children affected receive the necessary treatment and compensation. States should also ensure that women and girls of reproductive age are guaranteed protection from occupational exposure to toxics and the substitution of toxics with safer alternatives as the primary means of prevention;</p> <p>International organizations should integrate the problem of toxic chemicals, pollution and waste into the work of their organization, based on their respective competencies, and monitor and report on the issue; and increase efforts to reduce the exposure of children and women of reproductive age to toxic chemicals, particularly of child workers and those living in high-risk situations.</p> <p>During the mission, the Special Rapporteur examined the rights of workers who may develop diseases or other injuries on account of their exposure to hazardous substances. Workers in the Republic of Korea have the right to a healthy workplace.</p> <p>The report notes a long history of illness among workers in the electronics sector as a result of exposure to toxic chemicals. For example, a study of nearly 32,000 workers at IBM between 1969 and 2001 showed that “male manufacturing workers were around 60-80 per cent more likely to have died from cancers of the kidney, skin, brain and central nervous system”. Given the prominent role of electronics in the Republic of Korea in recent decades, the Special Rapporteur paid close attention to how the Government and businesses were protecting and respecting the human rights of workers in the electronics sector to a safe and healthy workplace.</p> <p>In the electronics industry, chemical substances are used in the manufacture of devices, including in displays, semiconductor chips, casings and batteries and other component materials. There is a significant likelihood that workers may be exposed to hazardous substances, which can lead to serious health impacts such as cancer, infertility, birth defects, respiratory illness and disruption of hormone (endocrine) systems. Former workers in the electronics industry in the Republic of Korea began to be diagnosed with leukaemia around 2005. Yumi Hwang, a former Samsung Electronics employee, died of acute myeloid leukaemia in March 2008. She was diagnosed 20</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Exploitation of those most at risk • Inaccessible remedies, justice and accountability • Failures to realize the right to information • Opaque supply chains and the transfer of hazardous work

<i>Report</i>	<i>References to occupational exposures</i>	<i>Challenges faced by workers</i>
	<p>months after she began working, at the age of 19, as an operator in production line No. 3 at the Samsung Electronics Giheung Plant.</p> <p>As of January 2015, more than 350 former workers in the electronics industry, of which approximately 130 have died, had alleged that they had developed various diseases. Victims had suffered from cancer, including lymphoma, malignant brain tumours, myelogenous leukaemia and non-Hodgkin's lymphomas, as well as aplastic anaemia, reproductive abnormalities and other health impacts. All former workers described to the Special Rapporteur were young females, including several in their early twenties. With many female workers of childbearing age, the alleged victims extend to the children of former workers. For example, the Special Rapporteur heard from a mother who had been pregnant during her employment and subsequently given birth to a child with birth defects. The Special Rapporteur heard testimony from former Samsung workers (all women) and their family members about tasks performed in the manufacture of semiconductor chips, such as dipping semiconductors into a chemical solution by hand to remove unnecessary parts and manually sorting and testing chips under high temperatures or voltages, releasing fumes. Former workers explained that they would still smell fumes from the workplace long after returning home. Neither the former workers nor the family members of the deceased could name the substances they had used in the workplace.</p> <p>The former workers of Samsung Electronics also described the pressure that they worked under at the time to meet production targets. They explained that they were often in a state of chronic fatigue and stress due to their 12-hour rotating shifts, working six days a week in addition to preparing for regular mandatory exams outside of working hours (unpaid). They described the constant pressure placed on them to train and to pass tests to perfect their workmanship, along with pressures not to unionize and insufficient training on chemical safety.</p> <p>Samsung would not disclose which substances were used during the time of employment of the alleged victims, claiming that it was confidential business information. Samsung explained that it does require suppliers to submit a letter of warranty that chemical formulas purchased do not contain hazardous substances. The Special Rapporteur reiterates that, under international laws, global policy frameworks and national law, health and safety information on hazardous substances should not be confidential.</p> <p>Samsung Electronics claims no hazardous substances are used in its production processes. Information was not provided by the company to justify this claim, clarify the categorization of "hazardous" or to explain if and when changes to chemicals used in production processes were implemented.</p> <p>There is strong evidence that hazardous substances are used in electronics manufacturing. Apple Inc. has stated that it has eliminated or plans to eliminate the use of certain hazardous substances in the production of its electronics. Of note, many of these substances were used in Apple's electronics supply chain during the period of employment of the alleged victims at Samsung Electronics. Also, Apple has stated that it has yet to phase out certain hazardous substances in power cords in the Republic of Korea due to an inability to obtain Government approval. The</p>	

Special Rapporteur is deeply concerned about the withholding of or failure to generate information about toxic chemicals in order to shield corporate liability.

In addition to the lack of transparency about hazardous substances used or released in the workplace, critical information about alleged victims was not disclosed by the Government, businesses or civil society to the Special Rapporteur. However, the Special Rapporteur had the opportunity to meet with several victims and victims' family members, Samsung Electronics, the Mediation Committee, and members of the Government. As of May 2016, Samsung Electronics claimed it had compensated 110 former workers affected with the specified diseases and had physically presented apology letters from the chief executive officer to those subject to compensation. The Special Rapporteur understands there are concerns regarding how the compensation process adhered to the recommendations of the Mediation Committee and encourages all parties to increase transparency and participation in this regard.

Also in January 2016, Samsung Electronics reversed its previous position on "prevention". It agreed with other parties to establish a three-member Ombudsman Committee to conduct an audit of the efforts of Samsung Electronics relating to prevention and propose recommendations for improvement. The Special Rapporteur welcomes the establishment of the Ombudsman Committee, and looks forward to its implementation with both transparency and meaningful public participation by all stakeholders. The Special Rapporteur also welcomes the acceptance by SK Hynix of including miscarriage and infertility in the scope of the agreement of what would be considered for compensation, in line with safety in working conditions, including the safeguarding of the function of reproduction. As of January 2016, SK Hynix had identified and compensated 39 former workers.

The long path to resolving cases illustrates the considerable difficulty workers face in demonstrating a sufficient causal relationship to realize their right to an effective remedy for the impacts of toxic chemicals. For a disease to be recognized as an occupational disease under article 5 (1) of Industrial Accident Compensation Insurance Act by the Korea Workers' Compensation and Welfare Service, there must be a "proximate causal relationship" between the worker's duties and disease. Article 34 of the Enforcement Decree of the Industrial Accident Compensation Insurance Act stipulates the specific conditions, in particular, that "causal relationship between the work-related injury and the disease should be medically recognized".

In contrast to the strict standard applied by the Korea Workers' Compensation and Welfare Service pursuant to article 34 of the Enforcement Decree of the Industrial Accident Compensation Insurance Act, courts in the Republic of Korea take a more lenient approach to the issue of causation. The Supreme Court has ruled that the claimant has the burden of proving the causal relationship; however, the causal relationship need not be proven medically or scientifically but can be inferred from the consideration of various situational factors.

Consideration of all the circumstances, such as the health of the worker at the time of employment, possible explanations for the disease, whether any hazardous substances existed in the workplace and the amount of time the worker spent in the workplace, makes possible the

- Inaccessible remedies, justice and accountability

conclusion that there is a proximate causal relationship between the worker's duties and the disease.

In 2014, the Seoul Administrative Court held that the deduction can be made that there is a proximate causal relationship between the former workers' diseases and their duties. The Supreme Court also said that the question of whether a proximate causal relationship exists should be judged on the basis of the health and physical conditions of the worker concerned and not an average person. Most recently, the Seoul Administrative Court reversed the decision of the Korea Workers' Compensation and Welfare Service and acknowledged ovarian cancer to be an occupational disease. It further stressed that, for rare diseases such as ovarian cancer, a more relaxed standard for assessing causality should be applied.

Noting the disparity among the Korea Workers' Compensation and Welfare Service industrial accident compensation scheme, decisions by courts in the Republic of Korea, and the dispute resolution committees established by Samsung Electronics and SK Hynix, the Special Rapporteur is concerned about the difficulty in accessing compensation under that scheme due to the high burden of proof imposed on the claimants. The Government's criteria for work-related diseases were revised in 2013. The Special Rapporteur emphasizes that States are obligated to refrain from interfering with the enjoyment of the right to social security. The burden upon the claimant to prove causation between the health impacts from which workers suffer and the hazardous substances in the workplace can be a significant inconvenience and obstacle, often because of difficulty in using or accessing information.

The Special Rapporteur sincerely commended Samsung Electronics for its spirit of cooperation, openness and continuing dialogue with him. He acknowledged internal changes by Samsung Electronics and steps taken to realize the right of former workers to an effective remedy, and recommended that Samsung Electronics and other implicated businesses, among other steps ensure that all former workers and contractors harmed by toxic chemicals in the manufacture of their products are indeed compensated, at a minimum according to recommendations of the Mediation Committee.

One major chemical accident affecting workers in the Republic of Korea was the hydrofluoric acid leak in Gumi, which occurred on 27 September 2012 at the Hube Global chemical plant, killing 5 workers and injuring 18 others, including plant employees and emergency personnel. The damage on property, including restoration costs, amounted to 55.4 billion won. Another accident took place at the Samsung Electronics plant in Hwaseong City, where hydrofluoric acid first leaked on 27 January 2013. As a result, one person died and four were injured. Subsequently, on 2 May 2013, three external contract workers were partially exposed to diluted hydrofluoric acid at Samsung's semiconductor manufacturing facility in Hwaseong City. The workers received immediate first aid attention on site and were admitted to hospital for further examination.

The Special Rapporteur welcomed the recent enactment of the Liability Act to help ensure that victims have access to an effective remedy, as well as legislative changes to prevent accidents. He also notes the studies and measures implemented by Samsung Electronics to prevent the

- Exploitation of those most at risk
- Inaccessible remedies, justice and accountability

Report	References to occupational exposures	Challenges faced by workers
	<p>recurrence of similar accidents. He encouraged the State and businesses to ensure that protections apply to both employees and contractors.</p>	
	<p>With regard to legislation, the Special Rapporteur recommended that the Government of the Republic of Korea, among other steps:</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Exploitation of those most at risk • Failures to realize the right to information • Inaccessible remedies, justice and accountability • Inaccessible remedies, justice and accountability
	<p>Ensure that all laws and policies concerning hazardous substances and wastes provide the greatest protection to those who are at the greatest risk of harm, including children, women, the elderly, communities near sources of pollution or contamination, workers and others who are at elevated risk of harm;</p>	
	<p>Undertake a robust study on the existing recourse of victims, including workers and consumers, to an effective remedy for harm that may be due to hazardous substances and wastes, paying particular attention to the burden placed on victims to establish causation, and develop and implement solutions to address challenges facing victims in accessing an effective remedy, in consideration of the recommendations contained in the findings of that study and those of the national human rights institution, as recommended below;</p>	
	<p>Ensure that information is available to prevent exposure to hazardous substances, protect human rights and ensure that victims have the information necessary to realize their right to an effective remedy in administrative and judicial systems. The Special Rapporteur underlines that States have a duty, and businesses a responsibility, to ensure that information about hazardous substances is available and accessible, and that it functions to protect the rights of everyone;</p>	
	<p>Increase efforts to ensure that health and safety information about hazardous substances is never confidential, and for this purpose ensure the enforcement of existing legislation or the strengthening of said legislation where necessary;</p>	
	<p>Establish a centralized mechanism to monitor all human rights impacts of hazardous substances and wastes, paying particular attention to children, women, workers in all sectors and older persons, and guarantee that adequate and comprehensive prevention measures are taken as a result;</p>	
	<p>The Special Rapporteur also recommended that the national human rights institution: (a) Examine the challenges faced by victims of chronic exposure to hazardous substances, including workers and children, who may develop diseases many years after exposure, in establishing causation and accessing an effective remedy, and make recommendations to relevant ministries; (b) Closely examine challenges presented by victims of hazardous substances, including workers, in meeting their burden of proof in order to access an effective remedy under administrative and judicial proceedings.</p>	

Report	References to occupational exposures	Challenges faced by workers
“Mission to Germany” (A/HRC/33/41/Add.2) (2016, mission carried out in 2015)	<p>The Special Rapporteur noted how, in realizing the workers’ right to information, the EU’s Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation has a number of noteworthy features. First, it contains tiered health and safety requirements for all industrial substances produced or imported at or above one ton per year. This pragmatic requirement, known as “no-data, no-market”, shifts the burden of proof away from public authorities and onto relevant businesses. Second, it requires industry to share information on the use of hazardous industrial chemicals up and down the supply chain to help ensure that substances are being used safely and information is current. In this way, the right to information also contributes to workers’ and consumers’ rights. Third, health and safety summaries are made available to Governments around the world, enabling those with fewer resources to avoid duplication of efforts and enhance cooperation. Fourth, consumers have the right to contact businesses to inquire whether a chemical linked to cancer, hormone disruption or other health and environmental hazards are found in certain products if they are on the “candidate list”. Finally, the information generated is enabling businesses to transition to safer chemicals and safer products. These are good practices for the realization of the right to information about industrial chemicals, and implementation of the Guiding Principles on Business and Human Rights.</p> <p>One of the most innovative features of recent changes to European Union pesticides laws is the prohibition on the use of certain pesticides linked with cancer, reproductive effects, hormone (endocrine) disruption and other adverse health effects, and certain physical properties. The approach of European Union pesticides legislation is risk-based, in that the exposure levels and corresponding risks to worker health, as well as human health and the environment more broadly, cannot be adequately assured for certain pesticides with such properties. This approach to pesticides is grounded in the principle of precaution, provided in the Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community.</p> <p>The Special Rapporteur considers this approach of using hazard-based criteria to be in line with the universality of human rights and the uncontrollable risks that certain hazardous substances pose to those rights. It is a commendable step by the European Union to protect the human rights of everyone, including agricultural workers and children.</p> <p>During meetings with Bayer, the business enterprise informed the Special Rapporteur that they had a human rights policy in compliance with the FAO International Code of Conduct on the Distribution and Use of Pesticides, and a stewardship policy that they say reflects the whole life cycle of a product. For each life cycle step, Bayer says it works on best management practices with the objective of human safety, worker/operator safety, residues in food, consumer safety and environmental aspects. It also claims to work as an industry on training materials to ensure the safe use of pesticides. The Special Rapporteur was pleased to learn of Bayer’s phase-out policy to remove all highly hazardous pesticides considered to be carcinogenic from their portfolio by 2012, and of its process of “portfolio screening” (covering insecticides and fungicides in 2011 and herbicides in 2015). However, he was concerned to learn that highly hazardous pesticides remain in the Bayer portfolio with no target date for phase-out.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Opaque supply chains and the transfer of hazardous work • Failures to realize the right to information <ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Opaque supply chains and the transfer of hazardous work • Failures to realize the right to information

Report	References to occupational exposures	Challenges faced by workers
	<p>The Special Rapporteur is concerned that, rather than substituting hazardous pesticides with safer alternatives, it would seem that Bayer prefers mitigation strategies that carry greater risks for workers and communities, such as wearing protective personal clothing and improvements on labelling. The Special Rapporteur considers that typically the only effective mitigation strategy for hazardous pesticides is a concerted effort to develop and adopt safer alternatives.</p>	
	<p>The Special Rapporteur also addressed the role of the German shipping industry in the abuses of human rights of workers in substandard shipbreaking facilities, particularly those in South Asia. German ship owners operate the world's fourth largest merchant fleet in terms of vessels and have been linked to widespread contamination of the food, water and air of local communities, in addition to fatalities and toxic chemical exposure among workers, including child and migrant workers, who dismantle ships in hazardous and deadly conditions. According to assessments by civil society, but disputed by the Government, in 2014, German ship owners sold a record high of 95 per cent of their end-of-life tonnage for substandard breaking on the beaches of South Asia. Despite recent progress, the extremely poor working practices and environmental conditions prevailing in many ship-breaking yards continue to be the source of widespread concern in the international community.</p>	<ul style="list-style-type: none"> • Monitoring and enforcement gaps • Exploitation of those most at risk • Informal economy • Deliberate efforts to delay or obstruct protection from toxic exposure • Opaque supply chains and the transfer of hazardous work • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Deliberate efforts to delay or obstruct protection from toxic exposure • Disconnected efforts on occupational and environmental
	<p>A major source of exposure to hazardous chemicals in Germany is in the workplace, and it is estimated that about 74,000 work-related deaths may be linked to workplace exposure to hazardous substances each year in the European Union – about 10 times more than workplace accidents.</p>	
	<p>While identification and controls for carcinogens are well developed with a specific Directive for Carcinogens and Mutagens at work, there is a need to extend protection against reproductive hazards. The European Union regulation protecting pregnant women in the workplace includes a list of chemicals that is very old and not updated, which means that many chemicals of concern, like endocrine disrupting chemicals or nano-materials, are missing. According to a study by the European Agency for Health and Safety at Work, around 15 per cent of European workers report handling chemical products for a quarter of their working time and 19 per cent report breathing in dust, fumes and smoke at their workplaces. This study highlighted nanoparticles, ultrafine particles, man-made fibres, carcinogenic, mutagenic and reprotoxic substances, dermal exposures, exposures in waste management and the increasing use of allergenic and sensitizing substances as emerging risks.</p>	
	<p>Specific occupations of emerging concerns include the growing waste management industry, construction and service activities such as cleaning or home nursing. In addition, there are a growing number of workers in small and medium-sized enterprises and subcontracted jobs, where</p>	

Report	References to occupational exposures	Challenges faced by workers
	<p>the management of chemical risks is generally poorer. The report also expresses concern about multiple exposures on emerging biological, physical and psychosocial emerging risks.</p> <p>REACH may not adequately protect workers, because the risks of daily exposure are primarily assessed for industrial chemicals at higher tonnage thresholds, whereas the majority of chemicals to which workers are exposed are at the lower thresholds. Since the level of hazardous substance exposure for workers is at much higher levels than the permissible exposure levels for consumers, information about adverse effects of chronic exposure is critical.</p> <p>In Germany, 16,165 suspected cases of occupational skin disease were recorded in 2004, representing a quarter of all registered occupational diseases. Other skin diseases include chemical burns ranging from rashes to full thickness skin damage requiring grafts. Chromate is the most dominant allergen, followed by epoxy resins and cobalt in the German construction industry. The German trade union IG Bergbau, Chemie, Energie says that information needs to feature more prominently on the European Chemicals Agency database, so workers can better access health and safety information.</p> <p>Although asbestos is prohibited in Germany, it is still found in buildings and ships. Specialized training and qualifications are required to dispose of asbestos safely, for instance, in demolition or renovation, particularly for informal workers.</p> <p>It was brought to the Special Rapporteur's attention that Germany has not put in place any specific measures to protect informal workers from the risks of hazardous substances. Currently the trade union IG Bauen-Agrar-Umwelt is campaigning for informal and migrant workers to receive basic health and safety instructions prior to working.</p> <p>BASF informed the Special Rapporteur of its global standards for workers' safety. BASF assured the Special Rapporteur that all plants were built according to the same standards and safety levels for workers. The company's goal is to reduce work-related accidents by 80 per cent by 2020.</p> <p>In both areas of private liability — the Environmental Liability Act and Law on Pharmaceuticals — a shift in the burden of proof to reflect a victims-based approach is welcomed. However, in the area of occupational health and safety, the Special Rapporteur heard of the immense challenges still faced by workers who fall ill from toxic chemicals to access any remedy.</p> <p>The Special Rapporteur is particularly concerned that European Union business enterprises, beyond Germany businesses, are exporting their manufacturing activities — and the risks to workers of toxic chemicals — to developing countries. Post-production, European Union businesses can import a product that claims to be “free of hazardous substances” even though hazardous substances were used in the supply chain outside the European Union.</p> <p>This practice is comparable to the supply chain of clothing that originates, for example, from a garment factory in Bangladesh that fails to respect workers' rights, including against sexual violence, and unlawfully targets labour leaders with intimidation, threats and violence. It is also similar to the global trade and supply chain in cobalt, a key component in rechargeable lithium-</p>	<p>health</p> <ul style="list-style-type: none"> • Failures to realize the right to information • Inaccessible remedies, justice and accountability • Opaque supply chains and the transfer of hazardous work • Restrained freedom of association <ul style="list-style-type: none"> • Inaccessible remedies, justice and accountability • Limited progress in prevention of exposure • Exploitation of those most at risk • Opaque supply chains and the transfer of

Report	References to occupational exposures	Challenges faced by workers
<p>“Pesticides and the right to food”</p> <p>(A/HRC/34/48) (2017)</p> <p>(Report written in collaboration with the Special Rapporteur on the right to food)</p>	<p>ion batteries, which may originate from artisanal miners in the Democratic Republic of the Congo, including child labourers who suffer health consequences from prolonged exposure to cobalt without even the most basic protective equipment.</p> <p>These two examples also highlight one of the major problems of REACH where business enterprises are seriously challenged in tracing the use of industrial chemicals throughout the supply chain, despite the reporting requirements of the Regulation.</p> <p>Among the recommendations of the Special Rapporteur was one to increase information for marginalized persons and those in vulnerable situations, especially pregnant women and those who work or live with children, about protection measures, especially endocrine disrupting chemicals.</p>	hazardous work
	<p>Human rights standards require States to protect vulnerable groups, such as farm workers and agricultural communities, children and women from the impacts of pesticides.</p> <p>Agricultural workers are routinely exposed to toxic pesticides via spray, drift or direct contact with treated crops or soil, from accidental spills or inadequate personal protective equipment. Even when following recommended safety precautions, those applying pesticides are subject to higher exposure levels. Families of agricultural workers are also vulnerable, as workers bring home pesticide residues on their skin, clothing and shoes.</p> <p>Studies in developed countries show that annual acute pesticide poisoning affects nearly 1 in every 5,000 agricultural workers. Globally, however, it is unknown what percentage of farmworkers experience acute pesticide poisoning owing to a lack of standardized reporting. Poor enforcement of labour regulations and lack of health and safety training can elevate exposure risks, while many Governments lack the infrastructure and resources to regulate and monitor pesticides.</p> <p>The exposure risk of children engaged in agricultural work is particularly alarming. Although little data are available, the International Labour Organization estimates that about 60 per cent of child labourers worldwide work in agriculture, and children often make up a substantial portion of the agricultural workforce in developing countries. Their increased sensitivity to the hazards of pesticides, the inadequacy of protective equipment and their lack of experience may leave them particularly exposed.</p> <p>Seasonal and migrant workers are also more vulnerable, as they may work temporarily at various agricultural sites, multiplying their exposure risk to pesticides. Language barriers may further prevent these workers from understanding labels and safety warnings, they may experience poor working conditions without access to adequate safety equipment and they may have difficulty accessing medical care and compensation for pesticide-related diseases. Workers may also have little control over the types of pesticides used.</p>	<ul style="list-style-type: none"> • Exploitation of those most at risk • Failures to realize the right to information • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Failures to realize the right to information • Inaccessible remedies, justice and accountability • Opaque supply chains and the transfer of hazardous work

Report	References to occupational exposures	Challenges faced by workers
<p>“Guidelines for good practices in relation to the human rights obligations related to the environmentally sound management and disposal of hazardous substances and wastes”</p> <p>(A/HRC/36/41) (2017)</p>	<p>The Special Rapporteur articulates a human rights-based approach to hazardous substances and wastes, including pollutants, toxic industrial chemicals and pesticides, which requires a specific focus on the protection of those most vulnerable or at risk: children, the poor, workers, persons with disabilities, older persons, indigenous peoples, migrants and minorities, while taking into account gender-specific risks. Designing laws and policies to protect those most at risk has been shown to have a ripple effect for the broader community. States must ensure that laws, policies and institutions aimed at assessing and mitigating the potential impacts of toxics are based on the needs of the most vulnerable.</p> <p>In 2013, the International Labour Organization (ILO) estimated that nearly 2 million workers per year — between 3 and 4 workers per minute — die prematurely from occupational diseases linked to toxic chemicals.⁵ Laws in most countries permit workers to be exposed to levels of toxic chemicals hundreds of times higher than the exposure allowed among the general public and often do not take into account real-world exposure scenarios or gender-specific and other sensitivities. Workers are frequently unable to exercise their right to freedom of association and collective bargaining, which is necessary to secure a healthy workplace.</p> <p>The report notes how information on toxics is essential in order to prevent adverse impacts, to ensure the realization of freedom of expression and to enable individuals and communities to participate in decision-making processes and to seek and obtain remedy. Health and safety information about toxic chemicals must never be confidential. Information must be available, accessible, functional and consistent with the principle of non-discrimination in order for human rights to be respected, protected, enjoyed and fulfilled. Despite notable improvements in many countries over recent decades, the right to information remains insufficiently realized in the area of hazardous substances and wastes, particularly with respect to protecting the most vulnerable from adverse impacts of exposure, whether from consumer products, at the workplace or via food, water, air or other sources.</p> <p>Workers should have the right to remove themselves from conditions they believe are unsafe, and the right to information regarding occupational health and safety. However, necessary information on safety precautions or health risks linked to toxic chemicals is often unavailable or inaccessible to workers. Information may be in a foreign language, and labelled pictures may be indecipherable or too small to be legible. States continue to allow the use of industrial chemicals and pesticides under the presumption that personal protective equipment will be used, and that it will be used as effectively as expected. However, workers often do not have access to necessary protective equipment of reasonable quality, and the conditions under which they are expected to use the equipment are often completely unreasonable; thus, risk assessments are inaccurate. Workers are exposed to substances whose health effects have not been studied adequately. Adverse health impacts from chronic occupational exposure to toxic chemicals may not manifest as a disease for several years. Due to these and other factors, only a small percentage of workers</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Exploitation of those most at risk • Restrained freedom of association • Failures to realize the right to information • Limited progress in prevention of exposure • Inaccessible remedies, justice and accountability

⁵ Updated figures are available in the present report at para. 3.

Report	References to occupational exposures	Challenges faced by workers
	have access to an effective remedy for violations of their rights.	
	<p>Child labourers, female workers, migrant workers and residents of low-income communities are significantly more vulnerable to toxic impacts due to unique sensitivities, cumulative impacts or unequal protections under the law. One of the worst forms of child labour is that in which children work with, or are exposed to any level of, hazardous substances. The World Health Organization (WHO) has published studies showing that children who work with hazardous substances have shorter average lifespans. Children are also at risk through the transmission of their parents' occupational exposures, in particular from their mother while they are in the womb or through breast milk. States must ensure that workers are able to enjoy the right to safe and healthy working conditions. States must protect the right of workers to just, decent and favourable conditions of work by preventing occupational exposure to toxic chemicals, a right that is indivisible from the right to the highest attainable level of physical and mental health and the right to physical integrity. States must ensure that workers have access to information and effective remedy for violations; they must also ensure that migrant workers enjoy the same rights as nationals of the State of employment regarding protection from toxic exposure.</p>	<ul style="list-style-type: none"> • Exploitation of those most at risk
	<p>The report recommends States uphold human rights through legislation to protecting against infringements resulting from toxic exposures at work. Many States have established constitutional rights and legislation of direct relevance to toxics in the workplace. Legislation in place covers particular life-cycle stages, different types of substances, different product categories, information requirements and other aspects relevant to the State's duty to protect.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure
	<p>The report recommends States translate evidence of potential impacts on the enjoyment of human rights into timely and effective measures to respect, protect and fulfil each right implicated. The ability to protect the human rights to life and to health and to realize the right to access to the benefits of scientific progress and its applications hinges upon the ability to translate evidence into protective laws and policies. As discussed above, States must make expeditious progress in the realization of the rights to life and to health, taking all possible measures to protect those rights. However, despite evidence of risks and impacts, there have been instances where the procedures of some States have enabled private interests to use scientific uncertainties as a basis for delaying action to reduce risks. This has led to extreme delays, some lasting decades, in translating evidence of hazard and risk into measures necessary to protect workers, children and others most at risk. This is an unfortunate exploitation of scientific uncertainty by private interests. Scientific uncertainty will always exist. Several States have adopted the principle of precaution to help ensure that action is taken despite those uncertainties. The principle of precaution is essential to the progressive realization of numerous human rights implicated by hazardous substances and wastes.</p>	<ul style="list-style-type: none"> • Deliberate efforts to delay or obstruct protection from toxic exposure
	<p>The report notes that businesses should identify and assess the actual and potential adverse human rights impacts in which they may be involved either through their own activities or as a result of their business relationships. They should identify actual and potential impacts throughout the life cycle of their products, including supply and value chains. Traceability of supply chains and the</p>	<ul style="list-style-type: none"> • Limited progress in prevention of exposure

Report	References to occupational exposures	Challenges faced by workers
	<p>life cycle of products is essential to identifying human rights abuses linked to the exposure of workers and communities to toxics.</p> <p>The importance of the supply and value chain and a lifecycle approach is emphasized in terms of the protection of human rights from toxic exposures. In addition to the pesticide manufacturers, downstream businesses are implicated in the value chain of food and agricultural production in which such hazardous substances are used. For example, according to UNICEF, “exposure to toxic chemicals is likely to be the single greatest health risk to pregnant and nursing workers in the palm oil sector”. Approximately 50 per cent of all consumer products around the world use palm oil, implicating large numbers of consumer product companies.</p> <p>Air pollution is also of grave concern to child, women and older workers as well as local communities. Illnesses related to haze resulting from the clearing of forests and peat lands for palm plantations not only affect workers and communities near plantations, but can have transboundary impacts. Although the burning of forests and the use of certain pesticides are illegal, compliance and enforcement is poor and such practices continue. Other food and agriculture sectors noted as facing challenges in preventing human rights abuses include coffee, cocoa, cotton and tobacco production.</p> <p>The Special Rapporteur notes that hazardous substances continue to be used in the manufacturing sector and as components of a variety of consumer products, implicating the rights of workers, local communities and consumers, as well as the rights of those who may be exposed to postconsumer waste. Concerns about human rights abuses linked to toxic chemicals have been raised in the context of the electronics sector and the textile, leather and other garment industries. Researchers have also identified a myriad of adverse health impacts linked to toxic chemicals in cosmetics, personal care products, cleaning products, detergents and other household consumer products.</p> <p>Retailers are able to demand compliance with human rights from their suppliers upstream to ensure that no community, consumer or worker suffers abuses due to hazardous substances linked to products they sell. Indeed, in response to consumer demands for products free of toxic chemicals and for ethical conduct by businesses, certain retailers are exceeding the standards provided by national and international laws. For example, retailers have prohibited the inclusion of certain chemicals of concern in their products.</p> <p>The guidelines for good practices are intended to assist States in ensuring that their laws and other practices are in line with their human rights obligations. In this vein, the Special Rapporteur recommended that States and other stakeholders apply a number of principles, including that: States must ensure that their practices relating to hazardous substances and wastes ensure equality, do not discriminate against any vulnerable group, including children, the poor, workers, persons with disabilities, older persons, indigenous peoples, migrants and minorities, and take into account gender-specific risks.</p>	<ul style="list-style-type: none"> • Monitoring and enforcement gaps • Opaque supply chains and the transfer of hazardous work • Inadequate standards of protection • Opaque supply chains and the transfer of hazardous work • Inadequate standards of protection • Exploitation of those most at risk

Report	References to occupational exposures	Challenges faced by workers
<p>“Mission to the United Kingdom of Great Britain and Northern Ireland”</p> <p>(A/HRC/36/41/Add.1) (2017)</p>	<p>The mission of the Special Rapporteur to the U.K. examined several worker rights-related issues. For workers who develop diseases from exposures to toxic chemicals at work, compensation, health care and other aspects of their right to an effective remedy can very often be unattainable. It is calculated that less than 1 per cent of sick workers receive compensation in the United Kingdom for non-asbestos-related occupational diseases.</p> <p>While the Health and Safety Executive has conservatively estimated that approximately 13,000 new cases of occupational disease arise each year, including cancers related to chemical exposure, alarming shortcomings in the United Kingdom compensatory system exclude many claimants due to disability thresholds, minimum exposure times and lack of recognition of elevated risks due to multiple exposures. The United Kingdom Industrial Injuries Advisory Council generally imposes a non-legal, non-scientific “relative risk” test, which requires that the condition be twice as common in the affected group as in the general population. Considering that this threshold is very difficult to meet, fewer occupational diseases are officially recognized in the United Kingdom compared with other countries that apply different criteria.</p> <p>In an example dating back to the 1980s, farmers and agricultural workers who believe they were affected by the use of organophosphate-based or “OP” pesticides in sheep dipping activities have faced severe difficulties in accessing an effective remedy. At the time, the United Kingdom Government ran a mandatory programme requiring farmers to chemically treat their sheep with pesticides to combat sheep scab. Most farmers used organophosphate-based dips to comply, as they were the only licensed products available initially. Organophosphate compounds were initially developed as neurotoxic chemical warfare agents due to their ability to inhibit blood cholinesterase activity.</p> <p>Over the next two decades, farmers reported a range of debilitating health problems, which they believed to be the result of poisoning from the organophosphate-based products, with symptoms including nausea, anxiety, pulmonary oedema and long-term neurological damage. Victim support groups compiled a list of more than 500 farmers believed to have suffered from ill health as a result of their exposure, although campaigners claim the real number to run in the thousands. Victims struggled to access appropriate treatment under the public health regime, as organophosphate poisoning was not considered to be a medical condition. Some were allegedly wrongly diagnosed as suffering from psychological issues and given medications that exacerbated their suffering. A number of individuals who were medically tested by the Government claim they experienced serious difficulties in obtaining the release of their medical records. The difficulty in establishing causation between chronic ill health and the use of organophosphate-based pesticides has seen many legal claims fail.</p> <p>In 2015, an internal report of the Health and Safety Executive of May 1991 was released under a freedom of information request, which established that government officials had warned of the dangers of exposure to organophosphate-based pesticides. Yet in the same month, the Minister of Farming demanded that local authorities clamp down on farmers who refused to use the chemical. The release of the internal report triggered calls by more than a dozen Members of Parliament for</p>	<ul style="list-style-type: none"> • Inaccessible remedies, justice and accountability • Deliberate efforts to delay or obstruct protection from toxic exposure • Failures to realize the right to information • Limited progress in prevention of exposure

Report	References to occupational exposures	Challenges faced by workers
	<p>an inquiry and public debate into whether farmers were misled over the use of organophosphate-based pesticides.</p> <p>Officials of the Department for Environment, Food and Rural Affairs explained that no precaution could ever offer 100 per cent protection from any exposure to organophosphate-based pesticides, and explained the difficulty in predicting exposure levels. In the May 1991 report, manufacturers of the sheep-dipping chemicals were criticized for providing inadequate protective measures and instructions for the use of the product. At the time, legislation and guidance to ensure the protection of agricultural workers using the organophosphate-based pesticides placed the burden on farmers to protect themselves. Since 1995, the sale and supply of organophosphate-based pesticides have been restricted to appropriately trained and certified users. The Veterinary Medicines Regulations 2006 introduced a requirement for sheep dipping to be supervised by a holder of a certificate of competence.</p> <p>The United Kingdom Government stated that it has invested a considerable amount of time and public money to understand all the risks relating to those compounds and determine how they could be minimized, and that it has been unable to identify any causal link between exposure to organophosphate-based pesticides and the symptoms reported. The Special Rapporteur was also referred to a statement on organophosphates issued by the Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment in 2014, which concluded that exposures to cholinesterase-inhibiting organophosphates that are insufficient to cause overt acute poisoning do not cause important long-term neurological toxicity in adults. However, a number of medical experts have spoken out about the use of organophosphate-based sheep dips and the high number of incidents of chronic ill health within the farming community. One independent study, which reviewed the available evidence concerning the neurotoxicity of low-level occupational exposure to organophosphate-based pesticides, found that 13 out of 16 studies showed evidence of neurological problems following long-term, low-level exposure. The United Kingdom Government stated that the Committee had reviewed this study, reaching its conclusion in 2014.</p> <p>While the United Kingdom has certain specific laws and common law rules to protect human rights in the context of business activities, for example the Health and Safety at Work Act 1974 and the Gangmasters (Licensing) Act 2004, comprehensive legislation to hold businesses to account for human rights abuses is lacking. While legislation provides for the criminal prosecution of a business enterprise, it is very difficult to prove the intent of a business, and the criminal justice system tends to focus on individual criminal liability, which can be difficult to attribute to a company. The Parliamentary Joint Committee on Human Rights, mandated to examine human rights matters within the United Kingdom, has recommended that the Government bring forward legislation to impose a duty on all companies, including parent companies, to prevent human rights abuses, with failure to do so becoming an offence, as under the Bribery Act 2010. The United Kingdom also appears to suffer from insufficient expertise and resources to efficiently combat corporate crime.</p> <p>The Special Rapporteur made a number of recommendations to the Government, including one</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Inaccessible remedies, justice and accountability

<i>Report</i>	<i>References to occupational exposures</i>	<i>Challenges faced by workers</i>
	that the Government examine the obstacles to the right to effective remedy by workers and other victims suffering from toxic exposure, including causation, and ensure that victims of United Kingdom companies operating abroad are able to access justice and remedy in the United Kingdom.	
“Mission to Sierra Leone” (Mission carried out in 2017)	<p>During his country visit to Sierra Leone, the Special Rapporteur met local residents and workers, paying particular attention on the impact of the agriculture, mining and waste sectors on workers and their communities. The Special Rapporteur noted with concern issues regarding workers in agriculture and mining sectors.</p> <p>The agriculture sector is linked with challenges including in relation to the monitoring and use of agro chemicals and their potential impact on agriculture workers communities living around areas where chemicals are used and the potential contamination of food and water sources. A study on the use of pesticides in Sierra Leone rice crops provided very concerning results.⁶ In his visit to rural communities, the Special Rapporteur heard complaints of contamination potentially related to the activities of business enterprises engaged in large-scale oil palm farming.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Exploitation of those most at risk • Informal economy • Disconnected efforts on occupational and environmental health • Failures to realize the right to information
“Mission to Denmark” (Mission carried out in 2017)	<p>During his country visit to Denmark, the Special Rapporteur was informed on concerns regarding potential health impacts of antibiotic use in livestock. These antibiotics increase the potential of spreading of Associated Methycillin Resistant Streptococcus Aureus (LA-MRSA or MRSA) CC398, an antibiotic resistant ‘superbug’, in the food chain, and among workers exposed to the raw pork.⁷ The Special Rapporteur remains seriously concerned by the vast human health consequences of antimicrobial resistance on workers and more broadly.⁸</p> <p>The Special Rapporteur acknowledges the efforts of Denmark in promoting occupational safety and health through cooperation with other governments, to which he attaches great importance</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Exploitation of

⁶ http://eprints.lancs.ac.uk/80079/1/ENVINT_D_16_00107.pdf.

⁷ See <https://countercurrents.org/2017/03/13/the-pig-industry-and-the-usage-of-antibiotics-in-denmark/>.

⁸ <http://www.who.int/drugresistance/documents/surveillancereport/en/>.

Report	References to occupational exposures	Challenges faced by workers
	<p>given the transnational production and disposal chains of Danish businesses. Among other activities, a 2016 project in Bangladesh established an expert group on Occupational Safety and Health (OSH Unit), in the Department for Inspection of Factories and Establishments (DIFE) of the Government of Bangladesh. The Special Rapporteur welcomes this cooperation and. However, the Special Rapporteur was disappointed to note that cooperation efforts on the protection of workers did not include support to the shipbreaking industry in Bangladesh or elsewhere, despite the substantial impacts of Danish businesses in this sector on the rights of foreign workers. The Special Rapporteur encourages further efforts to ensure all Danish businesses ensure all workers are protected from exposure to toxic substances in their supply chains, among other concerns for workers' rights.</p> <p>The Special Rapporteur was disturbed by the lack of attention to the continued exportation of hazardous pesticides banned by Denmark to countries that have lower levels of protection against the adverse impacts of such pesticides on the human right to health, among others. In some cases, products produced with such banned pesticides and other toxic chemicals can be imported back into Denmark.</p> <p>The Danish company Cheminova is one of the main producers of one such pesticide, Malathion, an insecticide to be used against chewing and sucking insect pests in crops. Evidence is publicly available on the serious risks posed by Malathion to the environment, especially water sources and biodiversity and to human health.⁹ An analysis conducted in 2016 by the World Health Organization International Agency for Research on Cancer (IARC)¹⁰ concluded that Malathion is probably carcinogenic to humans while identifying strong evidence that exposure to malathion-based pesticides is genotoxic. For these reasons Malathion is not commercialized in the EU, including Denmark. Yet, only in 2017, Cheminova A/S, a multinational pesticide producer based in Denmark exported Malathion to over 40 countries outside the EU.¹¹ In 2015, the Special Rapporteur expressed his concerns on the extreme impacts on the rights to food and water, and livelihoods of communities in Guatemala, when 500 to 1000 kg of fish were killed in Peten River, Guatemala, reportedly due to the heavy contamination of local waters by Malathion.¹² The practices of Cheminova in countries with weaker normative frameworks have been criticized in the past.¹³</p> <p>The exposure of communities and workers in States with weaker regulations to chemicals banned in Europe is an unacceptable demonstration of double standards.¹⁴ As previously addressed, additional legal instruments should be considered in Denmark in order to ensure companies</p>	<p>those most at risk</p> <ul style="list-style-type: none"> • Opaque supply chains and the transfer of hazardous work • Failures to realize the right to information • Limited progress in prevention of exposure • Exploitation of those most at risk • Opaque supply chains and the transfer of hazardous work

⁹ http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC32924.

¹⁰ <https://monographs.iarc.fr/ENG/Monographs/vol112/mono112-07.pdf>.

¹¹ See Export Notifications, European Chemical Agency.

¹² See GTM 4/2015.

¹³ Pesticide export to institutionally vulnerable countries, who is responsible? An assessment of the practices and strategies of a Danish company in Brazil.

¹⁴ A/HRC/33/41/Add.2 — include UK mission, pesticides report by SR food.

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	<p>respect human rights throughout their operations and conduct human rights due diligence in relation to their domestic and international operations and supply chains, always using the highest levels or protection when operating in different jurisdictions.</p> <p>In Greenland, controversy marked the implementation of military activities especially due to the difficulties in accessing information on the full nature of operations implemented by the US forces. Concerns existed, for example, on the impact of the contamination generated by the crash near of a US B-52 bomber loaded with nuclear weapons near the Thule Aribase. The local workers involved in the clean-up operation claimed long-term health problems resulted from their exposure to the radiation and legally challenged the Danish Government for allegedly failing to monitor the health consequences of their exposure to toxics. \</p> <p>The Special Rapporteur also noted the potential adverse health risks for workers who may be employed in the developing mining industry of Greenland.</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Exploitation of those most at risk • Failures to realize the right to information • Inaccessible remedies, justice and accountability
<p>“Shipbreaking”: Government of the United Kingdom, Government of Denmark, the Government of Brazil, and the Government of Bangladesh, and 2 companies (North Sea Production Company, A.P. Moeller Maersk, and Odebrecht) (2018)</p>	<p>In January 2018, the Special Rapporteur and the Working Group on Business and Human Rights brought to the attention of the Government of the United Kingdom, Government of Denmark, the Government of Brazil, and the Government of Bangladesh information received concerning the alleged transboundary movement of The North Sea Producer, an end-of-life ship owned by the UK registered North Sea Production Company, a single-ship joint venture between the A.P. Moeller Maersk (headquartered in Denmark) and Odebrecht (headquartered in Brazil) The ship, containing hazardous substances and wastes, arrived in August 2016 in Chittagong, Bangladesh for dismantling (shipbreaking). A similar letter was also addressed to the companies involved.</p> <p>At the yard where the North Sea Producer was supposed to be dismantled, shipbreaking work is carried out without workers having access to necessary safety equipment as well as use of proper safety and procedures. Work reportedly is carried out manually by workers with torch cutters. Oxygen and gas are pumped through a device that creates a 1500°C flame that can cut through steel coated with paints that contain hazardous substances such as heavy metals. Reports also indicate that workers do not use necessary protective clothing, some moving with bare feet and sandals in the tidal mudflat used as the dismantling area. Most workers live in unhealthy conditions in wood and sheet metal shacks right next to the walls of the shipyard. Coughs, headache and breathing problems are reported among workers in dismantling yards in the same</p>	<ul style="list-style-type: none"> • Inadequate standards of protection • Limited progress in prevention of exposure • Monitoring and enforcement gaps • Exploitation of those most at risk • Informal economy • Deliberate efforts to delay or obstruct protection from

Report	References to occupational exposures	Challenges faced by workers
“Electronics Industry”: Government of the People’s Republic of China, Government of the United States of America, and 2 companies (Catcher Technology Co. Ltd. and Apple Inc.) (2018)	area in Bangladesh.	toxic exposure
	Apart from highlighting the poor working conditions of the workers, this issue also exhibited the challenges in realizing the right to decent work, including transfer of hazardous work to developing countries, exploitation of those most at risk (migrant workers), capitalizing on the informal sector to skirt international obligations, as well as what may amount to deliberate efforts by business enterprises to delay or obstruct protection from toxic exposure of workers.	<ul style="list-style-type: none"> • Opaque supply chains and the transfer of hazardous work
	In May 2018, the Special Rapporteur and others brought to the attention of the Government of the People’s Republic of China information received concerning the alleged unsafe working conditions at Catcher Technology’s factory in Suqian, northern Jiangsu Province, People’s Republic of China, and the implications for the human rights of the affected workers. A similar communication was also addressed to the Government of the USA and two companies: Catcher Technology Co Ltd and Apple Inc. At the time of drafting this report, there were no responses received from the Governments regarding the allegations.	<ul style="list-style-type: none"> • Inadequate standards of protection • Opaque supply chains and the transfer of hazardous work
	Catcher Technology Co Ltd. (Catcher), headquartered in Taiwan, Province of China, is a world leader in the light metal industry, specializing in notebook computers, digital cameras, and disc drives. Catcher manufactures products for many well-known consumer electronics companies including Apple Inc. (Apple), an American technology company headquartered in Cupertino, California, United States of America. This communication highlighted various challenges faced by workers in relation to their health and exposure to hazardous substances and wastes including:	<ul style="list-style-type: none"> • Limited progress in prevention of exposure • Failures to realize the right to information
	The exposure of workers to hazardous substances and polluted indoor air: On 25 May 2017, an incident of toxic gas poisoning at the A6 workshop of the factory resulted in the hospitalization of 90 workers, with five workers admitted to intensive care. An investigation conducted by the Administrative Committee of the Suzhou-Suqian Industrial Park confirmed that poisonous gas permeated throughout the workshop, triggering adverse reactions among operator personnel. In addition, there is severe indoor air pollution at the factory, with some workers suffering from respiratory illnesses as a result.	<ul style="list-style-type: none"> • Inaccessible remedies, justice and accountability
	Workers are at risk of other health and safety hazards: The surface of the factory floor is often covered in oil, resulting in instances of workers slipping and falling. In addition, workers at the Computer Numerical Control (CNC) machining workshop of the factory are exposed to excessive loud noise, placing them at risk of irreversible hearing loss. In addition, the main door of the CNC machining workshop only opens 30 cm wide, posing a safety hazard, particularly in case of emergencies.	
	Workers’ right to information is not protected: The workers have insufficient information regarding the toxic substances they handle or could be exposed to and their potential hazards. For instance, workers are inadequately informed of the hazards of exposure to cutting fluid and of any relevant protection methods. While factory regulations require providing a 24-hour training to workers prior to starting work, the training offered is neither adequate nor effective. Training sessions are frequently less than an hour long and workers are handed questionnaires, the answers	

Report	References to occupational exposures	Challenges faced by workers
	<p>to which are read out by the staff. Such a practice restricts workers from fully understanding the nature and potential hazards of the toxic substance they handle or could be exposed to. Furthermore, information is not available regarding the exposure levels of workers to various toxic chemicals that are commonly used in electronics production and relevant information about the use of toxic chemicals at the factory.</p> <p>Workers are not provided with adequate Personal Protective Equipment (PPE): Excluding some workers who wear glasses, all other workers in the workshop operate machinery with no eye protection. The CNC machining workshop provides workers with a pair each of rubber and cotton gloves every day. However, the cotton gloves appear to have been previously used as they would be given to the workers while they were already damp and water-stained. The cutting fluid which CNC machine operators come into contact with is absorbed quickly by the cotton gloves along with other chemicals, oils, and fluids, thus eroding the rubber gloves worn inside. This results in the workers' hands making direct contact with the cotton gloves soaked in cutting fluid. The inadequate equipment has resulted in irritation and peeling off of skin on the hands of many workers. In addition, for workers who use pressure guns in the production process, the cutting oil splashes onto their heads. Single-use paper face masks provided by the factory only protect the workers' mouths and faces and the cutting fluid often splashes into the workers' eyes resulting in complications like eye pain, blurred vision and bloodshot eyes for prolonged periods.</p> <p>Workers face inadequate access to health and sanitation facilities: Workers at the factory are responsible for paying for their physical examinations. Workers do not undergo physical examinations after they resign making it difficult to determine if they have contracted an occupational disease as a result of working at the factory. Workers applying through labour dispatch companies are not given social insurance during their probationary work period. Workers do not have access to healthcare services and have to pay for any occupational treatment out of pocket for the first three months of work, as Catcher only distributes social insurance cards three months after the contract commences. While there is legal provision for access to treatment for occupational illnesses, many workers remain vulnerable due to inadequate access to contractual documents from the employer, insufficient or lack of regular health checks for workers, and unsatisfactory or lack of workplace evaluations which would be evidence for the worker to prove the link between exposure and the illness.</p> <p>The bathrooms in the factory's housing area do not have adequate hot water facilities even during the winter. Workers have on occasion fallen ill due to inadequate heating and insufficient shelter from the wind in the shower areas. There are also no emergency hallways or exits in the workers' dormitories.</p> <p>The food provided to workers is unsanitary: For instance, there have been many occasions where workers have suffered from diarrhoea after eating at the factory cafeteria. The factory does not permit workers to leave the factory area during lunchtime and workers therefore cannot purchase their own food.</p>	

<i>Report</i>	<i>References to occupational exposures</i>	<i>Challenges faced by workers</i>
“Tobacco industry”: Government of Zimbabwe, 10 companies and the Governments of their countries of domicile	<p>In May 2018, the Special Rapporteur and others brought to the attention of the Government of Zimbabwe information received concerning alleged human rights violations resulting from exposure of workers including children, to toxic chemicals while working in tobacco farming farms in Zimbabwe, specifically in Mashonaland West, Mashonaland Central, Mashonaland East, and Manicaland. A similar communication was also addressed to 10 companies and to the Governments of their countries of domicile. At the time of drafting this report, there were no responses received from the Governments regarding the allegations.</p>	<ul style="list-style-type: none"> • Opaque supply chains and the transfer of hazardous work • Exploitation of those most at risk
Companies: Alliance Once International Inc. British American Tobacco (BAT) PLC Chidziva Tobacco Processors (Private) Limited China National Tobacco Corporation & Tian Ze Tobacco Company Contraf Nicotex Tobacco GmbH (CNT) Imperial Brands PLC Japan Tobacco Inc & Japan International SA Northern Tobacco (Private) Limited Premium Tobacco International DMCC Universal Corporation Countries of domicile: Germany Japan People’s Republic of China	<p>In 2018, there are approximately 100,000 registered tobacco farmers, comprising both large-scale and small-scale farmers. It is alleged that workers involved in tobacco production in Zimbabwe face serious health and safety risks. Workers allegedly have insufficient information, training, and equipment to protect themselves from exposure to pesticides and other toxic chemicals. Reports of workers hired on large-scale farms suggest that many workers, including some children, are coerced into working hours that are in excess of agreed time without overtime compensation. Some workers allege that they are denied their wages and forced to go weeks or months without pay. Workers who have refused to work overtime without additional pay have allegedly been dismissed or have been threatened with dismissal.</p> <p>Workers reportedly suffer from nausea, vomiting, loss of appetite, stomach pain, headaches, dizziness, skin irritation (particularly of the face), chest pain, blurred vision, eye irritation, respiratory irritation, and other symptoms of Green Tobacco Sickness (GTS), a type of nicotine poisoning that occurs while handling tobacco plants. Some of these adverse health impacts are reportedly developed from the application of pesticides on the tobacco farms. Long-term and chronic health effects of pesticide exposure include respiratory problems, cancer, depression, neurologic deficits, and reproductive health problems.</p> <p>It is reported that neither government officials nor company representatives have provided workers with adequate information about nicotine poisoning and pesticide exposure, or with sufficient training or comprehensive education to protect themselves. Some workers reportedly are not provided with, and often lack the means to procure equipment necessary to protect themselves, despite legal provision requiring employers to ensure that workers handling hazardous substances, including pesticides, are informed about the risks of the work, and provided with proper protective equipment.</p> <p>It is alleged that in the tobacco industry in Zimbabwe children are involved in work on farms and other parts of the production process and do so in hazardous conditions, often performing tasks that threaten their health and safety or interfere with their education. It is reported that during the labour-intensive planting and harvesting seasons, high rates of absenteeism are recorded in schools near tobacco farms as children are engaged in work either as individuals or as part of their families.</p> <p>Children are allegedly exposed to pesticides while working on tobacco farms in Zimbabwe. Some children mix, handle, or apply pesticides directly. Others are exposed when pesticides are applied</p>	<ul style="list-style-type: none"> • Informal economy • Inadequate standards of protection • Limited progress in prevention of exposure • Failures to realize the right to information

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Switzerland	to areas close to where they were working, or by re-entering fields that had been very recently sprayed. Many children report immediate illness after having contact with pesticides. It is further reported that children work long hours handling green or dried tobacco leaves and as a result suffer specific symptoms associated with acute nicotine poisoning and pesticide exposure. Allegedly, the symptoms of GTS are clearly visible in child labourers, and monitoring systems are inadequate to detect health impacts of chronic exposure to pesticides and other toxic chemicals.	
United Arab Emirates		
United Kingdom		
United States of America (2018)		