

### KEY DATA

#### CLUSTER MUNITION CONTAMINATION: MEDIUM

ACCORDING TO NATIONAL AUTHORITY DATA

**0.65** KM<sup>2</sup>

SUBMUNITION  
CLEARANCE IN 2021

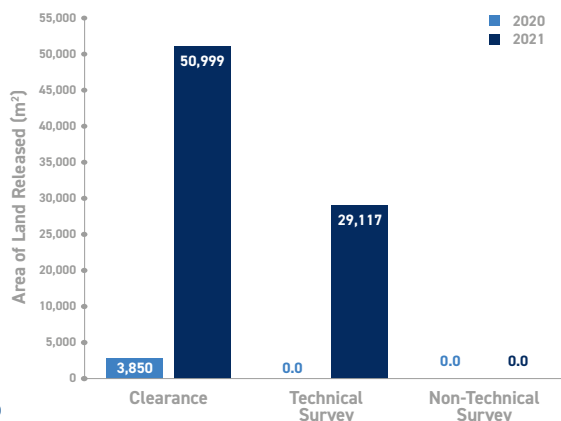
**50,999** M<sup>2</sup>

SUBMUNITIONS  
DESTROYED IN 2021

**25**

(INCLUDING 22 DESTROYED  
DURING SPOT TASKS)

### LAND RELEASE OUTPUT



## KEY DEVELOPMENTS

A six-week armed conflict between Armenia and Azerbaijan over the Nagorno-Karabakh region broke out in September 2020 and ended with Azerbaijan regaining control over most of its internationally recognised territories except for a part of Nagorno-Karabakh.<sup>1</sup> In the course of the fighting, both Armenia and Azerbaijan are reported to have used cluster munitions. Armenia's Center for Humanitarian Demining and Expertise (CHDE) reported new cluster munition-contaminated area within Armenia's jurisdiction and control as a result of the 2020 hostilities. Non-technical survey in 2021 identified new hazardous areas and a baseline non-technical survey launched in 2022 was expected to determine more precisely the extent of contamination before the end of the year.<sup>2</sup> CMR clearance output in 2021 was a significant increase on the previous year, due to the focus on new CMR contamination from the 2020 conflict.

## RECOMMENDATIONS FOR ACTION

- Armenia should commit to never again use cluster munitions.
- Armenia should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Armenia should comply with its obligations under international human rights law to clear cluster munition remnants (CMR) on territory under its jurisdiction or control as soon as possible.
- Armenia should expedite the adoption of national mine action legislation.
- Armenia should elaborate a strategic plan for mine action, including for CMR survey and clearance.
- Armenia should establish a platform for dialogue and cooperation with mine action operators and other stakeholders for information sharing and learning.

## CLUSTER MUNITION SURVEY AND CLEARANCE CAPACITY

### MANAGEMENT

- Center for Humanitarian Demining and Expertise (CHDE)

### NATIONAL OPERATORS

- In addition to serving as the national mine action authority, CHDE also conducted survey and clearance operations in 2021

### INTERNATIONAL OPERATORS

- The HALO Trust

### OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Project (UNDP)

## UNDERSTANDING OF CMR CONTAMINATION

Prior to the 2020 conflict with Azerbaijan, Armenia had just one confirmed hazardous area (CHA) of CMR contamination in Kornidzor, Syunik province.<sup>3</sup> In 2021, over 45,000m<sup>2</sup> of the area was cleared leaving an area estimated to cover almost 340,000m<sup>2</sup> at the end of the year.<sup>4</sup>

The CHDE reported direct evidence of new explosive ordnance (EO) contamination, including M095 cluster munitions, in Gegharkunik, Syunik, and Tavush provinces bordering Azerbaijan resulting from the six-week-long conflict in 2020. According to the CHDE, artillery, including BM-21 rocket launchers, were used to bomb Armenian settlements bordering Azerbaijan.<sup>5</sup> In November 2020, Amnesty International reported a strike by Azerbaijan, possibly from a Grad rocket, that landed in the Armenian village of Davit Bek in Syunik province. Azerbaijan also used cluster munitions in attacks on Nagorno-Karabakh during the 2020 conflict. (See Mine Action Review's *Clearing Cluster Munition Remnants* report on Nagorno-Karabakh for further information).

At the end of 2021, the CHDE reported a total of almost 0.65km<sup>2</sup> of CMR contamination (including the CMR contamination in Kornidzor that pre-dated the 2020 conflict), comprising nearly 0.36km<sup>2</sup> of confirmed hazardous area (CHA) and 0.29km<sup>2</sup> of suspected hazardous area (SHA) (see Table 1).<sup>6</sup> The CHDE identified 16,341m<sup>2</sup> of CHA and 290,982m<sup>2</sup> of SHA involving CMR in Davit Bek from the 2020 conflict, which was added to the national Information Management System for Mine Action (IMSMA) database.<sup>7</sup> A further 35,109m<sup>2</sup> was discovered and released in Davit Bek in 2021 following technical survey (5,992m<sup>2</sup> was cleared and 29,117m<sup>2</sup> was reduced).<sup>8</sup> All the contaminated area discovered in Davit Bek was reported to be as a result of the 2020 conflict.<sup>9</sup>

A baseline non-technical survey began in 2022 to determine the extent of new CMR and other EO contamination arising from the 2020 conflict. By the middle of 2022, the baseline non-technical survey had already been completed in Syunik province.<sup>10</sup> The baseline of EO contamination is said to be undertaken through inclusive consultation with women, girls, boys, and men.

**Table 1: Cluster munition-contaminated area by province (at end 2021)<sup>11</sup>**

Province	CHAs	Area (m <sup>2</sup> )	SHAs that may contain CMR	Area (m <sup>2</sup> )
Syunik (Kornidzor)	1	339,881	0	0
Syunik (Davit Bek)	1	16,341	3	290,982
<b>Totals</b>	<b>2</b>	<b>356,222</b>	<b>3</b>	<b>290,982</b>

### OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Armenia is also contaminated with anti-personnel mines and other explosive remnants of war (ERW). (See Mine Action Review's *Clearing the Mines* report on Armenia for further information).

## NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The CHDE was established by the Armenian government in 2011 as a non-commercial State body responsible for conducting survey and clearance and identifying contaminated areas. In 2014, the CHDE was designated Armenia's national mine action authority (NMAA).<sup>12</sup> An Advisory Board oversees the CHDE at the Deputy Minister level, with representation from the Ministry of Defence; Ministry of Emergency Situations; Ministry of Territorial Administration and Infrastructure; Ministry of Education, Science, Culture and Sports; the Ministry of Justice; and the Ministry of Foreign Affairs.<sup>13</sup> In 2013, in conformity with a government decree, the CHDE began developing national mine action legislation. The CHDE began drafting the law in 2015<sup>14</sup> with the support of the Organization for Security and Co-operation in Europe (OSCE) office in Yerevan.<sup>15</sup> In 2019, the CHDE expected to submit the draft mine action law to the new Parliament of Armenia for discussion before the end of the year.<sup>16</sup> As at May 2022, the draft mine action law was reported to still be under development, with the hope it might be finalised by the end of 2022.<sup>17</sup>

1 Thomas De Waal, "Unfinished Business in the Armenia-Azerbaijan Conflict", Carnegie Europe, 11 February 2021, at: <https://bit.ly/3PFvArZ>.

2 Email from Vaghinak Sargsyan, CHDE SNCO Director, 13 June 2022.

3 Email from Margaret Lazyan, Head of Mine Risk Education and Victim Assistance, CHDE, 26 July 2021.

4 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

5 Emails from Margaret Lazyan, CHDE, 26 April and 26 July 2021.

6 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

7 Email from Vaghinak Sargsyan, CHDE, 13 June 2022.

8 Ibid.

9 Email from Fiona Kilpatrick-Cooper, Head of Region – Europe (South Caucasus), HALO Trust, 18 May 2022.

10 Email from Vaghinak Sargsyan, CHDE, 13 June 2022.

11 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

12 Emails from Ruben Arakelyan, CHDE, 8 June 2015; and Margaret Lazyan, CHDE, 10 August 2020.

13 Emails from Geneva International Centre for Humanitarian Demining (GICHD), 13 July 2022; and Ani Zakaryan, Head of the Information Management, CHDE, 21 July 2022.

14 Email from Varsine Miskaryan, CHDE, 8 August 2016.

15 Email from Ruben Arakelyan, CHDE, 28 April 2017.

16 Email from Margaret Lazyan, CHDE, 19 April 2019.

17 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

In 2021, the government allocated AMD317.6 million (approx. US\$695,000) to cover the costs of the CHDE and AMD6.3 million (approx. US\$14,000) for survey and clearance operations.<sup>18</sup> The national authorities do not provide direct funding to The HALO Trust, which conducted limited CMR survey and clearance in 2021. The CHDE contracted HALO Trust for a battle area clearance (BAC) task in Kornidzor region, with the Centre providing quality assurance (QA) and quality control (QC).<sup>19</sup>

The United Nations Development Programme (UNDP) provides capacity development to the CHDE within the framework of the "Strengthening the Capacities of National Mine Action Authorities in Armenia" project. Under the same project, the Geneva International Centre for Humanitarian Demining (GICHD) plans to support the CHDE in installing IMSMA Core, conducting needs assessments, and training staff on the updated information management system, and in June 2022, the CHDE reported that the process was underway.<sup>20</sup> UNDP and the GICHD will also support the CHDE in elaborating the National Mine Action Strategy and Law on Mine Action.<sup>21</sup>

## ENVIRONMENTAL POLICIES AND ACTION

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The CHDE deploys methods and tools to avoid damaging the environment where possible.<sup>22</sup> Armenia does not yet have a national mine action standard on environmental management, but plans to develop one.<sup>23</sup>

The HALO Trust also seeks to minimise the environmental impact of its survey and clearance activities. It minimises fuel consumption by sharing vehicles; it does not burn vegetation during the clearance process and does not remove vegetation unnecessarily; it takes care not to contaminate water sources with fuels, lubricants, and paints; and it takes rubbish away with it when it leaves a task. HALO also plans clearance operations around agricultural planting and harvesting cycles.<sup>24</sup>

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## GENDER AND DIVERSITY

The CHDE does not have a gender policy and associated implementation plan but has reported that gender has been mainstreamed in Armenia's draft national mine action strategy. During survey and community liaison activities, all groups affected by contamination are consulted, including women and children, and ethnic or minority groups. According to the CHDE, the needs of women and children in affected communities are taken into account in prioritisation, planning, and tasking of survey and clearance operations. However, the CHDE does not disaggregate mine action data by sex.<sup>25</sup>

The CHDE is said to offer equal employment opportunities for both men and women. Seventeen of the fifty CHDE employees are women (32%, down from 36% in 2020), while six of sixteen managerial positions are held by women. Two of six staff in the Operations Department are women, as are two staff in the training centre and five of six staff in the Explosive Ordnance Risk Education (EORE) Group. Survey teams do not include representatives from different ethnic or minority groups.<sup>26</sup>

The HALO Trust, in its limited activities in Armenia, disaggregates mine action data by age and sex. It is an equal opportunities employer, but due to the local cultural context and nature of the work, the majority of HALO staff deployed in Armenia are men.<sup>27</sup> It has a team of four people based in Armenia: two are administrative staff and both are women, and two are operational staff and both are men. When HALO Trust deploys clearance and survey teams to Armenia, they are selected from its staff in Nagorno-Karabakh. In 2021, no women were engaged in HALO's survey and clearance operations in Armenia.<sup>28</sup>

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18 Ibid.

19 Email from Vaghinak Sargsyan, 13 June 2022.

20 Ibid.

21 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

22 Ibid.

23 Ibid.

24 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

25 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

26 Ibid.

27 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

28 Ibid.

## INFORMATION MANAGEMENT AND REPORTING

The CHDE manages the national IMSMA database.<sup>29</sup> The CHDE had been planning to install IMSMA Core in 2019, but this was delayed due to the outbreak of COVID-19 and was due to be installed in June 2022.<sup>30</sup> In June 2022, the GICHD and UNDP held an Information Management Stakeholder Workshop with the CHDE and other partners in Armenia to help identify the needs of the CHDE and other mine action stakeholders. This will feed into the design of forms and procedures for the new IMSMA Core database in Armenia.<sup>31</sup> In 2020, the CHDE elaborated QA and QC forms using KoboCollect Software to improve data collection in the field.<sup>32</sup> IMSMA Core will allow the direct entry of data into the database using Survey123.<sup>33</sup>

## PLANNING AND TASKING

The draft National Strategic Plan on Mine Action was presented for the approval to the Armenian Government in 2018. However, in early 2021, the plan was under reconsideration due to the emergence of new challenges (primarily the contamination resulting from the 2020 conflict)<sup>34</sup> and by May 2022, it was still being developed.<sup>35</sup> The main objectives of the original draft Plan were to address, as a priority, anti-personnel mines in CHAs that have a humanitarian impact, and increasing community safety in support of the achievement of the 2030 Sustainable Development Goals (SDGs).<sup>36</sup>

Tasking for clearance is based on CHDE criteria. Priority is given first to contaminated areas that are up to 1km away from a population centre, then to those near agricultural land, and finally to contaminated areas that negatively affect the environment. These are mostly located in the mountains. To optimise efficient deployment of resources, clearance plans are typically drawn up on a community-by-community basis.<sup>37</sup>

Armenia's annual work plan for 2021 had envisaged: BAC of 45,000m<sup>2</sup> of CMR and EO contamination in the Kornidzor area (Syunik province); technical survey and clearance of

15,000m<sup>2</sup> of battle areas in Davit Bek; and non-technical survey in Gegharkunik, Syunik, and Tavush provinces that would identify and target new contamination from the 2020 conflict with Azerbaijan.<sup>38</sup> In 2022, the CHDE started the baseline non-technical survey to determine the extent of new EO contamination arising from the 2020 conflict, and planned to clear 50,000m<sup>2</sup> of EO-contaminated area and to reduce a further 60,000m<sup>2</sup>.<sup>39</sup> Priorities for clearance will be defined when the non-technical survey results are analysed.<sup>40</sup>

The HALO Trust was planning to conduct non-technical survey in Syunik province in 2022 under an EU-funded project,<sup>41</sup> but in June 2022 the CHDE reported it had finalised the non-technical survey in Syunik using its own staff.<sup>42</sup> The CHDE indicated that in March 2022 it issued a non-technical survey task to HALO Trust for nine areas in Gegharkunik province.<sup>43</sup>

Obtaining visas for Armenia is straightforward for HALO Trust employees and HALO Trust has not faced any significant difficulties in importing demining equipment. However, Memorandums of Understanding (MoUs) undergo approval from relevant ministries and the CHDE and the process can be lengthy.<sup>44</sup>

## LAND RELEASE SYSTEM

### STANDARDS AND LAND RELEASE EFFICIENCY

The CHDE developed the Armenian National Mine Action Standards (NMAS), which were approved by the government in 2014.<sup>45</sup> In 2018, amendments were made to the NMAS for mine risk education, accreditation of demining organisations, and mine detection dogs (MDDs). No amendments were made to the NMAS in 2021.<sup>46</sup> According to the CHDE, reviews of the NMAS are conducted to ensure they are consistent with the International Mine Action Standards (IMAS) and international best practice.<sup>47</sup>

29 Email from Ruben Arakelyan, CHDE, 19 March 2014.

30 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

31 Email from GICHD, 13 July 2022.

32 Emails from Margaret Lazyan, CHDE, 25 June 2020 and 26 April 2021.

33 Email from GICHD, 13 July 2022.

34 Emails from Margaret Lazyan, CHDE, 10 August 2020 and 26 April 2021.

35 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

36 Email from Margaret Lazyan, CHDE, 19 April 2019.

37 Email from Ruben Arakelyan, CHDE, 28 April 2017.

38 Emails from Margaret Lazyan, CHDE, 26 April 2021.

39 Emails from Vaghinak Sargsyan, CHDE, 11 May 2022; and Ani Zakaryan, CHDE, 21 July 2022.

40 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

41 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

42 Email from Vaghinak Sargsyan, 13 June 2022.

43 Emails from Vaghinak Sargsyan, 13 June 2022, and from Fiona Kilpatrick-Cooper, HALO Trust, 15 May 2022.

44 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

45 Email from Margaret Lazyan, CHDE, 19 April 2019.

46 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

47 Emails from Margaret Lazyan, CHDE, 19 April 2019 and 26 April 2021.

The CHDE has been developing standard operating procedures (SOPs) for several years.<sup>48</sup> SOPs on manual mine clearance, BAC, marking of hazardous areas, and medical support were all elaborated by 2018.<sup>49</sup> In 2020, the CHDE prepared SOPs on Information Management (IM), non-technical survey, technical survey, explosive ordnance disposal (EOD) and QM.<sup>50</sup> The CHDE has no strategy to address residual contamination. The only national capacity to address contaminated areas discovered following completion of clearance is within the CHDE.<sup>51</sup>

As previously mentioned, Armenia does not yet have a national mine action standard on environmental management, but plans to develop one.<sup>52</sup> The HALO Trust, when conducting occasional deployments in Armenia, operates under SOPs that were updated in line with those in Nagorno-Karabakh, which are accredited by the CHDE.<sup>53</sup>

## OPERATORS AND OPERATIONAL TOOLS

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In 2021, the CHDE deployed three non-technical survey teams, each comprising a team leader and three surveyors, compared with one non-technical survey team in 2020. Two technical survey teams were deployed by the CHDE in 2021, in contrast to 2020 when Armenia only conducted BAC and EO clearance, which was undertaken by the Foundation for Demining and Demolition (FDD), a national non-governmental organisation.<sup>54</sup> The CHDE had planned to add one new non-technical survey team and one or two demining teams in 2021; in practice, two non-technical survey teams were added and two technical teams. The CHDE is planning to deploy two more clearance teams.<sup>55</sup>

The HALO Trust deployed a manual CMR team of eight deminers in Armenia between July and September 2021, and two non-technical survey teams with a total of eight personnel in October and November 2021.<sup>56</sup>

QM is conducted in accordance with IMAS and the NMAS. QA is conducted by dedicated officers who make regular field visits to inspect cleared land.<sup>57</sup> QC is conducted once clearance of the land has been completed, prior to handover.<sup>58</sup>

COVID-19 had no impact on survey or clearance operations in Armenia in 2021.<sup>59</sup>

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# LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

## LAND RELEASE OUTPUTS IN 2021

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The conflict at the end of 2020 resulted in a reported increase in CMR contamination and in survey and clearance activities in Armenia. Prior to the 2020 conflict, only Kornidzor was still known to be contaminated with CMR and EO.<sup>60</sup> Davit Bek, which had been fully cleared and handed over to the community in 2019, was reported to be re-contaminated with ordnance, including CMR, in the 2020 conflict.<sup>61</sup>

According to data provided by the CHDE, in 2021, 80,116m<sup>2</sup> of cluster munition-contaminated area was released: 29,117m<sup>2</sup> reduced through technical survey (see Table 2), and 50,999m<sup>2</sup> through clearance (see Table 3), with the destruction of 25 submunitions (3 during clearance and 22 during EOD spot tasks). No cluster munition-contaminated area was cancelled through non-technical survey in 2021.

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48 Email from Varsine Miskaryan, CHDE, 8 August 2016.

49 Email from Margaret Lazyan, CHDE, 8 August 2018.

50 Email from Margaret Lazyan, CHDE, 26 April 2021.

51 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

52 Ibid.

53 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

54 Email from Margaret Lazyan, CHDE, 26 April 2021.

55 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

56 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

57 Email from Ruben Arakelyan, CHDE, 8 June 2015.

58 Email from Margaret Lazyan, CHDE, 8 August 2018.

59 Emails from Vaghinak Sargsyan, CHDE, 11 May 2022; and Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

60 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

61 Email from Margaret Lazyan, CHDE, 26 April 2021.

## SURVEY IN 2021

Although no cluster munition-contaminated area was cancelled through non-technical survey in 2021, non-technical survey did result in defining a total of 343,173m<sup>2</sup> of new hazardous areas in Davit Bek: 15,500m<sup>2</sup> (CHA 07), 20,350m<sup>2</sup> (CHA 08), 16,341m<sup>2</sup> (CHA 09), 3,680m<sup>2</sup> (SHA 10), 4,218m<sup>2</sup> (SHA 11) and 283,084m<sup>2</sup> (SHA 12). CHA 07 and CHA 08 were subsequently technically surveyed and released through clearance (5,992m<sup>2</sup>) and reduction (29,117m<sup>2</sup>).<sup>62</sup>

Following the end of the conflict in November 2020, the CHDE conducted technical survey and EOD tasks in Syunik province and by July 2021 had destroyed more than 30 submunitions. In 2021 alone, the CHDE reduced 29,117m<sup>2</sup> of cluster munition-contaminated area through technical survey (see Table 2).

**Table 2: Reduction through technical survey in 2021<sup>63</sup>**

Province	Task number	Area reduced (m <sup>2</sup> )
Syunik (Davit Bek)	CHA 07	12,691
Syunik (Davit Bek)	CHA 08	16,426
<b>Total</b>		<b>29,117</b>

## CLEARANCE IN 2021

The CHDE reported that a total of 50,999m<sup>2</sup> of CMR contaminated land was cleared in 2021, and three submunitions were destroyed.<sup>64</sup> This included 46,007m<sup>2</sup> of battle area in Syunik cleared by The HALO Trust where no cluster munition remnants were found.<sup>65</sup> A further 22 submunitions were discovered by the CHDE during EOD spot tasks in 2021 and destroyed by the Armenian army.<sup>66</sup>

The 50,999m<sup>2</sup> of CMR clearance in 2021, as reported by the CHDE, was an increase on the previous year, when only 3,850m<sup>2</sup> of CMR took place. The increased clearance output in 2021 was due to Armenia addressing new CMR contamination resulting from the 2020 conflict.

**Table 3: CMR clearance in 2021**

Province	Operator	CHA number	Area cleared (m <sup>2</sup> )	Submunitions destroyed
Syunik (Davit Bek)	CHDE	CHA 07	2,285	0
Syunik (Davit Bek)	CHDE	CHA 08	3,707	3
Syunik	HALO Trust	CHA 02	45,007	0
<b>Totals</b>			<b>50,999</b>	<b>3</b>

## PROGRESS TOWARDS COMPLETION

There is no fixed date for the completion of clearance of remaining CMR contamination in Armenia and non-technical survey continues to determine the extent of new CMR and EOD contamination. The CHDE has indicated that funding is needed to accelerate progress in clearance.<sup>67</sup>

**Table 4: Five-year summary of CMR clearance**

Year	Area cleared (m <sup>2</sup> )
2021	50,999
2020	3,850
2019	0
2018	0
2017	0
<b>Total</b>	<b>54,849</b>

<sup>62</sup> Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

<sup>65</sup> Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

<sup>66</sup> Emails from Vaghinak Sargsyan, CHDE, 11 May 2022; and Ani Zakaryan, CHDE, 21 July 2022.

<sup>67</sup> Email from Vaghinak Sargsyan, CHDE, 11 May 2022.